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10



ADVANCED DICTATION  
AND  
SECRETARIAL TRAINING

BY  
CHARLES G. REIGNER, A.B., LL.B.

WITH TECHNICAL VOCABULARIES AS THEY  
WOULD APPEAR WHEN WRITTEN IN  
ROWE SHORTHAND



THE H. M. ROWE COMPANY  
BALTIMORE                      SAN FRANCISCO

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## PREFACE

The plan of this book makes it possible to give a systematic and thoroughly correlated training course in advanced dictation, stenographic practice, and secretarial procedure. The student makes an intensive study, from the secretarial point of view, of nineteen representative lines of American business. In the last section of the book he is given definite instruction and practice in selling his services. While the secretarial training work is carried out in connection with different lines of business in order to give breadth and variety to the course, it has been so developed throughout that upon its completion the student will have secured a comprehensive training in the various duties associated with a secretarial position.

The text is characterized by an abundance of practical exercise work. It is futile to expect that skill, initiative, and judgment can be acquired by asking students to *read about* these desirable qualities. The situations brought about in this text actually call forth and develop the kind of ability possessed by the high-grade secretarial worker.

Each section of the text contains the following material:

(1) A "style letter" written on an actual letterhead and differing in arrangement with each section. The student is directed to arrange the letters in each section according to the form illustrated by the style letter in that section; thus when he has worked through the text he will have become familiar with all the various accepted styles of letter arrangement.

(2) A list of technical terms frequently used in the business being studied. All of these terms occur in context in the letters and other material which the student practices in the course of his work. Definite assignments are made which require the systematic study of these terms both from an English and a shorthand point of view. Complete understandable definitions are provided and the outlines are grouped by businesses into a shorthand vocabulary beginning on page 371. This study of the distinctive terminology of the more important lines of business will prove of the utmost value in broadening the student's vocabulary.

(3) Twelve letters, all with appropriate addresses, counted and marked off in groups of twenty words. All of these letters originated in the executive and administrative departments of business offices. The material has been chosen with three things in mind. Each letter is a specimen of high-grade dictation such as is given by capable business executives; it is of a technical character illustrating the specialized language of the business; and it contains information which gives real insight into the character and methods of the business under consideration.

(4) A series of office training assignments. The distinctive feature of these assignments is that they are *always appropriate to the line of business being studied.*



In each section the student occupies the position of stenographer or private secretary to some executive in the business who is personated by the teacher. The office training assignments represent a "cross section" of the secretary's activities in that business.

In addition to taking and transcribing dictation, practice is provided in the preparation of bills and negotiable paper, the filling in of blank forms such as leases and bills of lading, the writing of specifications, bonds, mortgages, agreements, and other business and legal documents, and the filing of correspondence.

The assignments in secretarial practice form an interesting and valuable feature of the text. These assignments carry the student beyond the routine of office work and develop originality and initiative. This work is correlated in a most interesting manner with the correspondence given in each section.

Accompanying the text there is a Budget of Forms which contains the letterheads, billheads, statement forms, blank checks, notes, drafts, bills of lading, and "rough draft" copy required in working out the assignments.

Each section contains a "transcription assignment" in which the student is directed to take and transcribe five letters. This material is provided in the author's text, "Classified Dictation Drills," intended for the use of the teacher in dictating new matter to which the student does not have access. These letters are comparable in diction and technicality with the letters which the student practices from this text. In "Classified Dictation Drills" the author has also made available to the teacher who wishes to use them articles describing technical manufacturing processes and containing specialized information about the lines of business represented in this book.

The author gratefully acknowledges the assistance of Mr. H. M. Rowe, Jr., in the preparation of this work. The suggestions which he offered as to various features of the office training work have very materially added to the value of the book. The author also takes this opportunity to acknowledge his indebtedness to the many men of large affairs who have courteously furnished material for the book or reviewed the section devoted to the line of business with which they are associated. While help has been derived from many sources too numerous to mention specifically, the following business men have laid the author under special obligations: Mr. W. T. Hibbs, Manager, Security Adjustment Company of Pittsburgh; Mr. E. B. Passano, President, The Williams and Wilkins Company, Baltimore; Mr. Robert S. Sutcliffe, American Telephone and Telegraph Company, New York City; Mr. A. S. Loizeaux, Electrical Engineer, Consolidated Gas Electric Light and Power Company, Baltimore; and Mr. T. W. Siemon, Vice-President, Union Switch and Signal Company, Swissvale, Pa. The illustrations of the various filing devices have been courteously supplied by the Yawman and Erbe Manufacturing Company, Rochester, N. Y.

CHARLES G. REIGNER.

## TO TEACHERS

To make the most advantageous use of this text the class should have had a course in general dictation such as that contained in the author's "Dictation Course in Business Literature." In this book the student's work is specifically related to various lines of business. The student is employed as a stenographer in various offices, and his work in each section is done under the direction of the teacher, who occupies some executive position in each office.

Several plans can be followed in teaching the text. In a high school shorthand course of four or more semesters the book provides material for two periods of work a day throughout the last semester. For this last semester's work it combines in one book a dictation text, a typewriting text, and an office training text. When the book is used in this way it is intended that one week shall be spent on each of the twenty sections in the text. The technical terms and the letters in each section provide the material for home work practice. For each day's home work assignment the teacher may direct the class to practice two of the letters a given number of times. In addition ten terms in the list of technical terms with their definitions may be assigned daily for home work study.

The first part of each daily *shorthand* period is devoted to repetition practice on the assigned work, the object being the acquisition of speed and accuracy in handling technical business correspondence. The remainder of the shorthand period is devoted to laying out the office training work for the day, the dictation of letters for transcript purposes, the figuring of bills, and such other office training assignments as do not involve the use of the typewriter. During the daily *typewriting* period the student will systematically work out the assignments which require the use of the typewriter.

The author has provided the letters for the "transcription assignment" in each section in another book entitled "Classified Dictation Drills." Five letters for each line of business are given. The teacher should preferably dictate *one* letter for transcription each day.

A member of the class may be appointed assistant manager or chief clerk to aid in checking the work prepared by the class. As will be observed, there is in each section an assignment in "punctuation and paragraphing." The letters which form the material of these assignments are set up in correct form in the corresponding section in "Classified Dictation Drills." The students' work may thus be compared by the assistant manager with this model.

At the beginning of his work each student should be provided with an ordinary folder in which to keep the carbon copies of the work which he does. It is suggested that the *filing* in each section may most advantageously be done at the end of the week. The addresses of the transcript letters in "Classified Dictation Drill" have been carefully selected to provide varied practice in filing; if the teacher wishes to still further extend this work he may dictate one address for a given letter to one group of students and another address to another group. The body of the letter, of course, will be the same for the entire class.

The only equipment absolutely necessary for carrying out this course is a filing cabinet or file drawers equipped with guides for the various systems of filing. The teacher's desk will of course be provided with baskets for the correspondence and other matter which is prepared by the students, together with an outgoing mail basket for letters which have been prepared for mailing. All the letterheads, billheads, and other blank forms, as well as the specifications and rough draft copy called for in the assignments, are provided for each student in the accompanying Budget of Forms. No extra forms are included. The student should therefore be impressed with the necessity of exercising great care in the preparation of his work so that no forms will be wasted. Provision is made in the text at appropriate places for the teaching of various kinds of office devices such as the mimeograph, the multigraph, and adding and listing machines. If no duplicating devices are available, the assignments calling for such work may be prepared on the typewriter with carbon copies. Practice in telephoning and in the use of such office reference books as are available should be given in connection with the corresponding assignments in the text.

If the teacher wishes to limit the work of the class to training in office routine, the assignments on Secretarial Practice in each section may be omitted. The value of these assignments, however, in developing initiative on the part of the students cannot be overestimated. They are an indispensable part of the work of the class if a real secretarial training course is contemplated.

As will be readily seen the book finds its greatest usefulness in a course in which the dictation work and the office training work can be correlated as described above. In the more intensified work of the business school in which four periods a day are frequently devoted to shorthand and typewriting in the advanced or "speed" class, the work may be carried out exactly as described above except that it will be possible to cover two sections of the text each week. Should the teacher, however, prefer to *follow* the dictation work with a course in office training and secretarial procedure, the *dictation* material of the book may be employed as practice matter for the advanced class and the work called for in the office training assignments deferred until the student is promoted to the office training class. In such cases an entire day should be devoted to the office training work of each section. Every effort, however, should be made to work out a course by which the advanced dictation and the office training work may be carried on simultaneously.

## TO STUDENTS

In this book you are going to study, among other things, the language characteristic of the leading lines of business. You cannot correctly transcribe letters dictated to you unless you are more or less familiar with the words which the dictator uses. Make it a point, therefore, to study carefully the spelling, the shorthand outlines, and the definitions of the technical terms given in connection with each line of business.

Practice the letters assigned for home work with great care. Technical matter is more difficult to read than general matter. The context will be less helpful in reading your notes. Make a definite effort to follow the line of reasoning of the business men who originally dictated the letters in this book.

Study carefully the footnotes. Here you will find much compact information relating to the customs peculiar to each line of business, explanations of expressions used in the letters, as well as "pointers" about the spelling and use of words.

In your work in this text it is assumed that you are a stenographer working successively in various offices in which your teacher occupies some executive position, such as manager or vice-president. The object of the "Office Training Assignments" is to make you thoroughly familiar with stenographic and secretarial duties and to provide practice which will give you skill in performing those duties. Read each assignment very carefully before you proceed to do the work for which it calls. One of the most important things you need to cultivate is the ability to understand and carry out instructions just as they are given.

In carrying out the work of this book you are actually getting business experience under the direction of your teacher. Your work if carefully and faithfully done will give you a feeling of confidence when you take your first position. You will not be a beginner in the sense that you know nothing of office routine; but you will have a fund of knowledge and skill which you can apply immediately and directly to the problems which confront you in the office in which you will be employed.



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## Fidelity Adjustment Company

J. T. BENNETT, PRESIDENT

COLLECTIONS AND ADJUSTMENTS

WALTER E. PRATT, COUNSEL

520-530 EUCLID ARCADE BUILDING

CLEVELAND, OHIO January 15, 1920.

Mr. Chester D. Sidney,  
Secretary, Northern Copper Co.,  
Seattle, Wash.

Dear Sir:

In re H. Y. Lynch

We have collected the interest, computed at 6% and amounting to \$32.60, on the above account. We are aware that the note provided that 10% attorney fees should be added. This fee, however, cannot be collected in Michigan, the courts in that state having held that such fees are in the nature of penalties and for that reason are not collectible.

You understand that the collection of this claim cannot be enforced, inasmuch as all of Mr. Lynch's personal property is covered by a chattel mortgage in the amount of \$1200; furthermore, he has a contract interest only in his real estate.

When there is anything further to report, you will hear from us again.

Yours truly,

FIDELITY ADJUSTMENT CO.

*D. C. Barton*  
Treasurer

DEB/LFR

## COLLECTION AGENCY SECTION

### TECHNICAL TERMS

- accommodation paper**—any negotiable instrument, such as a draft<sup>1</sup> or promissory note, made or endorsed without consideration for the benefit of another.
- accrued interest**—interest accumulated on a debt not due or on a debt past due.
- acquittance**—the act of discharging from a debt or other liability; the writing evidencing such discharge.
- affidavit**—a sworn statement in writing; a declaration in writing made upon oath before a magistrate or notary public.<sup>2</sup>
- appraisal**—setting a value upon.
- assignee**—a person to whom a transfer of some right or title is made. The one who transfers the right or title is the *assignor*.
- attachment**—the act or writ whereby property is taken into custody of the law, pending a suit, as security for any judgment that may be rendered.
- bankruptcy**—inability to pay all debts as a result of failing in business; insolvency.
- Bill of Particulars**—a writing setting forth in detail the items of an account or other matter in a suit at law.
- chattel mortgage**—a transfer of personal property by a debtor to his creditors, on condition that it is to be void in case of future payment.
- collateral security**—any property which is given to secure the performance of a contract and which is to be surrendered upon the fulfillment of the contract.
- credit memorandum**—a statement showing items and amounts credited to a customer's account.<sup>3</sup>
- defendant**—one against whom a suit at law is brought.
- delinquent**—due and unpaid; as a *delinquent account*.
- deposition**—a statement, written or oral, made before an authoritative officer of the law to be used as a substitute for the production of the witness in court.
- disbursements**—money paid out.
- equity**—the remaining interest belonging to one who has mortgaged his property for a certain sum.
- execution**—the official order by which an officer is empowered to carry a judgment of a court into effect.
- foreclosure**—the process of obtaining a judgment for the payment of an overdue mortgage; and in default of such payment disposing of the mortgaged property at public sale and applying the proceeds to the payment of the mortgage.

<sup>1</sup> Refer to pages 162 and 163 for illustrations of a draft and a note.

<sup>2</sup> See the illustration of an affidavit on page 270.

<sup>3</sup> An illustration of a credit memorandum will be found on page 177.





- garnishment**—a summons by a court to one holding another's property not to pay or deliver it to the defendant, but to appear in court to answer the suit of the plaintiff. To *garnishee* property is to obtain such a writ against it.
- hypothecate**—to put property of any kind in pledge as security for a debt or other obligation.
- insolvent**—not possessing means or funds for the payment of debts.
- joint creditors**—creditors whose interests are united as distinguished from those who sue individually.
- judgment**—the decision of a court as the result of a suit at law. A *judgment note* is one on which a judgment may be secured without the process of a suit.
- levy**—to enforce a judgment by seizing property under a judicial writ for the purpose of securing funds to satisfy creditors.
- limitation of action**—the period of time prescribed by legal authority after which an action cannot be brought.<sup>4</sup>
- liquidate**—to pay off or settle.
- litigate**—to carry on a suit at law.
- mercantile agency**—a firm whose business it is to secure information as to the credit standing of business enterprises.
- mortgage**—a grant or conveyance of an estate or property to a creditor for the security of a deed, to become void on the payment of such deed. The *mortgagor* is the one who gives the mortgage on his property; the *mortgagee* is the one to whom the mortgage is given.
- Negotiable Instruments Law**—a law, now in force in most of the states, relating to negotiable paper; that is, such paper (as drafts or notes) which may be transferred from one person to another by endorsement or delivery.
- payee**—the party to whom the payment of any kind of commercial paper is directed to be made.
- penalties**—sums to be forfeited for non-payment, or for non-compliance with an agreement.
- plaintiff**—one who brings a suit at law.
- power of attorney**—a written instrument under seal by which one party appoints another to act for him.<sup>5</sup>
- preferred creditors**—creditors who are entitled to an advantage, as in the time or amount of payment, not possessed by other creditors designated as *common creditors*.
- referee**—a person appointed by the court to try a cause in place of the court or to perform some function involving judicial powers.
- summons**—an order served on the defendant notifying him that he has been sued. It informs him of the time and place of the trial and the name of the plaintiff.
- surety**—a person who engages to be answerable for the debt or default of another.

<sup>4</sup> Each state has a "Statute of Limitations" fixing the time within which actions must be brought.

<sup>5</sup> A power of attorney is shown on form 15 in the Budget of Forms.

**tender**—an offer of money or any other thing in satisfaction of a debt or liability.  
**title-clause contract**—a contract transferring title to property which contains one or more clauses restricting or adding to the rights, privileges, or obligations that would ordinarily pass with such title.  
**transcript**—a copy of the proceedings in a suit at law.<sup>6</sup>  
**writ**—a formal writing under seal issued by competent legal authority.

## CORRESPONDENCE

1

The Booth & Baker Co.,  
 310 Fulton Building,<sup>7</sup>  
 San Francisco, Calif.<sup>8</sup>

Gentlemen:

We have your letter of December 12<sup>9</sup> enclosing papers in your account against the Wylie Portable Engine Company. We | cannot undertake the collection of this account for the following reasons:

A Joint Creditors' Bill was filed against the firm | on March 21 last, an assignee in bankruptcy<sup>10</sup> was appointed by the court, and all common creditors were notified | to present their claims in joint issue. The court ruled that the claims of the preferred creditors were not bona | fide,<sup>11</sup> which barred them from the action.

The common creditors who filed claims received one hundred cents on the dollar, |<sup>100</sup> and an acquittance was

granted the debtor on all outstanding claims of creditors who had failed to join issue. The | limitation of action thus established by the court bars you from legal process,<sup>12</sup> as it discharges the debtor concern from | its former legal obligations.

Yours truly, (146)

2

Park Sales Agency,  
 642 Wilton Bldg.,  
 Columbus, Ohio.  
 Attention of Mr. J. K. Clark<sup>13</sup>  
 Gentlemen:

We have your letter of the 14th making inquiry in regard to the balance outstanding on the account of | Charles Y. Young. The debtor failed to settle the account in full; consequently we have taken a transcript from the | Justice of the Peace and filed it with the Clerk of Courts at Waverly, Ohio.

<sup>6</sup> The court testimony given on page 331 is a part of the reporter's transcript in a case.

<sup>7</sup> The word *building* is written out so that the three lines of the address will "balance." Ordinarily it is abbreviated in addresses as in letter 2.

<sup>8</sup> This is the official government abbreviation.

<sup>9</sup> When the month precedes the date, omit the *st*, *d*, or *th* after the figure; but when the name of the month is omitted, always add the appropriate letter or letters to the figure.

<sup>10</sup> Consult the definitions of *assignee* and *bankruptcy* in the list of technical terms. An *assignee in bankruptcy* is a person to whom is transferred the title to the estate of a bankrupt for the purpose of its preservation and proper distribution among creditors.

<sup>11</sup> A Latin phrase meaning *in good faith*.

<sup>12</sup> The whole course of proceedings in a suit at law.

<sup>13</sup> This form of address is used so that the letter may be brought directly to the attention of Mr. Clark. Note that the salutation is "Gentlemen."

Mr. Young has been notified | that unless he makes settlement in full on or before Monday, June 19, we will bring a creditor's <sup>14</sup> bill to | sell his real estate. We cannot believe that he will allow the matter to drag on and thus incur the <sup>100</sup> expense of a suit in the Common Pleas Court.

The debtor owns a farm in Pike County, on which there | is a small mortgage. The mortgagee has threatened foreclosure, and summons has in fact been issued; but even if it | is foreclosed Mr. Young's equity will be more than sufficient to cover the small balance due us.

Yours truly, (159)

3

Mr. W. H. Willis,  
Hotel Severin,  
Indianapolis, Ind.

Dear Mr. Willis:

In re<sup>15</sup> A. R. Butler Pottery Co. vs.<sup>16</sup> Saunders & Co.

We enclose full particulars of this | account and wish you to stop off at Lafayette on your way to Chicago and make every possible effort to | collect. Please refer to our former correspondence on this subject.

If the debtors insist that there was any breakage in | the shipment, have them produce a statement of the

<sup>14</sup> Why is the apostrophe placed before the s in this word and after the s in "joint creditors' bill" in letter 1?

<sup>15</sup> A Latin phrase meaning *in the matter of*.

<sup>16</sup> Abbreviation for *versus* meaning *against*.

<sup>17</sup> In addresses of this kind the entire expression, "Secretary, National Cloak Company," is in apposition with Mr. K. H. Masters; consequently the expression should not be divided but written together on the second line.

<sup>18</sup> That is action which is absolute and permits of no question.

damage signed by the freight agent at Elwood; also have them | make affidavit as to the damage involved. Under no other circumstances accept less than the full amount.

If you find<sup>100</sup> that you cannot make any progress with the claim, turn it over to Simms & Chase our attorneys at Huntington. | In case you do so, inform them that the account has been placed upon the basis of two-thirds of | 10% on the first \$300 and two-thirds of 5% on the balance.

Please | interview the debtors at your earliest convenience and let us have a detailed report.

Very truly yours, (177)

4

Mr. K. H. Masters,  
<sup>17</sup>Secretary, National Cloak Co.,  
483 Flynn Building,  
Dayton, Ohio.

Dear Sir:

In re National Cloak Co. vs. J. W. Peters.

We have your letter of March 10 stating that | you have had nothing from us in the above cause, and suggesting that we take peremptory action<sup>18</sup> against the surety | on this note.

We communicated with Mr. Thomas J. Walton, who appears as

y. His reply, dated March 9, just reached us. Mr. Walton is that he was not notified of Peters' failure to meet the note its due date. According to the Negotiable Instruments Law of Tennessee he is thereby automatically relieved of responsibility. Unless you can show that you notified the corporation that the note was not paid at maturity, it is our opinion that you will not recover from him.

If you cannot adduce<sup>19</sup> such evidence, our only suggestion is that you institute suit to secure a garnishment against Peters' salary. He has refused our demands for payment, but we are inclined to believe that a writ of attachment will frighten him into settlement. If we cannot collect in this way the case is hopeless. Should we proceed to garnishee his salary?

Yours truly, (190)

5

Albert O. Sands,  
802 Hill Avenue,  
Rockford, Ill.

Sir:

We have your letter of the 15th. We are satisfied you will have no difficulty in eventually collecting from the Excelsior Motors Corporation with interest on the account. While the corporation's bonded debt<sup>20</sup> is considerable, it is well understood in financial circles that sufficient collateral security has been

furnished for all loans received from local banks. A recent appraisal of the plant and equipment of this corporation was entirely satisfactory to its creditors in this city, among which are the banks referred to. Your information that certain manufacturers of automobile parts have secured an attachment against the corporation<sup>100</sup> on the ground that it was insolvent is erroneous, and we should like very much to know the source of your information.

It is true that some of the property of the corporation has been hypothecated, which has hurt its credit standing with the mercantile agencies, but the present management is rapidly overcoming the adverse conditions under which the plant has been operated for the past six months. It appears to us that the creditors who lend a helping hand in the present emergency by granting an extension of credit will profit thereby in the end.

Very truly yours, (199)

6

Messrs. Douglas & Becker,  
112 Webster Street,  
Everett, Wash.

Gentlemen:

In re Rodney Calcium Light  
& Film Company

The rehearing of this case was held before the alderman yesterday at four o'clock. Our attorney was

<sup>19</sup> That is, bring forward or cite in proof of what is alleged.

<sup>20</sup> A debt evidenced by a bond issue.

<sup>21</sup> Use the sign "&" only in a firm name.



present. Prior to the hearing he had a conference with counsel<sup>22</sup> for the defendant, | who explained to our attorney<sup>23</sup> the defendant's defense and exhibited the papers in his possession. Our attorney expresses himself as | being doubtful of his ability to secure judgment finally. He believes he will succeed in the action before the alderman; | but there seems to be no doubt that if judgment is secured before the alderman, the case will be appealed |<sup>100</sup> to the County Court.

In the course of the conference with the defendant's counsel our attorney secured the following propositions, | which he believes are the most advantageous settlements possible:

First—Defendant will pay \$100 and the alderman's costs | for the delivery of the sign f. o. b.<sup>24</sup> Bellingham, Wash.

Second—Defendant will pay \$30 and the costs | in full settlement of the claim and allow you to retain the sign and sell it on the best terms | you can make.

We suggest that you decide on one of these propositions. In case you are determined to push |<sup>200</sup> the suit, let us know at once. The next hearing has been set for May 24.

Yours respectfully, (219)

7

Jordan Supply Co.,  
831 N. Eaton St.,  
Rome, N. Y.

Gentlemen:

In re Davis Mfg. Co.

We enclose a copy of a letter from the debtor company to our attorney, | the attorney's reply, and a copy of his letter to us reporting on the case. He is a capable lawyer | and since he has so frankly stated his doubt as to the successful outcome of the case if it is | brought to trial, we deem it advisable to refer the matter to you again for a decision as to what | action we should take under the circumstances.

In the judgment of counsel the case is quite complicated and many points |<sup>100</sup> have come up in the negotiations so far conducted which, if suit is entered, would be left to the jury | to decide as matters of fact.

The debtors appear to invite suit, but a review of your letter of November | 14 shows that you do not wish to litigate because of the expense involved and the resulting delay. We agree | with you in part, but as we cannot obtain any offer of settlement by way of compromise, we shall be | compelled either to proceed with the suit if you are reasonably sure of your facts, or drop the case. If |<sup>200</sup>

<sup>22</sup> That is, the lawyer. *Counsel* means advice or one who gives advice, as a lawyer. It is to be distinguished from *council*, which means a legislative assembly.

<sup>23</sup> How is the plural of *attorney* spelled?

<sup>24</sup> F.o.b. means *free on board*. The Rodney Calcium Light & Film Company of Bellingham, which is the defendant in this case, stipulates that our clients, Douglas & Becker, shall pay for the transportation charges on the sign from Everett to Bellingham.

you are prepared to give our attorney unlimited authority and will assist him by personal witnesses and testimony, we have | no objection to bringing the case to trial.

We do not wish to assume the responsibility of recommending suit; we | are simply referring the entire matter to you again for a careful investigation of the facts and with the request | that you give us further instructions.

Yours respectfully, (268)

8

The J. G. Knight Co.,  
635 Broad Street,  
West Chester, Pa.

Gentlemen:

In re Henry W. White

In order to secure payment on the two notes issued to you by Mr. | White, our attorney entered suit, obtained judgment, issued execution, and levied on some furniture, which was subsequently sold by the | sheriff. We succeeded in collecting \$203.30, two-thirds of the original debt less the credit | memorandum of \$9.25, which as payee's agent we endorsed on one of the notes.

For services | rendered we are charging 10%, which, taking into consideration the legal services, is very low. Twenty per cent. | <sup>100</sup> of \$203.30 is \$40.66. Deducting this from the amount collected | leaves a balance of \$162.64. We are also accounting for the costs which | you

advanced, \$5.00, making the amount due you \$167.64. Enclosed you will | find our check for the amount.

It develops that the third note, made by Wm. J. Burton in favor of | the debtor and endorsed by him over to you, was an accommodation note. The attorney refused to handle it because | <sup>200</sup> it is almost impossible to collect on accommodation paper of this kind. He claims that White is now totally uncollectible,<sup>25</sup> | and that he is fortunate in getting the above settlement.

We have transferred this note to another attorney who has | been reporting to us, but up to this time no definite information in regard to a settlement has been received. | As soon as we receive a report on it, we shall write you again.

Yours very truly, (277)

9

C. F. Johnson, Esq.,<sup>26</sup>  
1426 Exchange Bldg.,  
Chicago, Ill.

Dear Sir:

In re J. H. Anderson

I have talked with Mr. Anderson and cannot secure payment. In the first | place he disputes the bill, stating that he has received statements heretofore showing the balance due to be \$275 | instead of \$375. He does not seem to have satisfactory evidence to substantiate | this contention. However, after investigating his financial condition I feel sure

<sup>25</sup> Note the spelling, *uncollectible*.

<sup>26</sup> The title Esq. is often added to the names of lawyers. Never use *Mr.* and *Esq.* with one name.

we could not collect \$375 | even if we had a judgment.

He has some real estate, but as it is quite heavily mortgaged, he has |<sup>100</sup> very little if any equity. He recently lost his printing establishment, which was taken from him under a title-clause | contract, and he is working on a salary and percentage basis for the Commercial Printing Company of this city. His | present income is only sufficient to meet the living expenses of his family and allow him to save a nominal | sum each month to apply on his obligations.

He states that he wants to pay every dollar he owes but | that it is impossible for him to do so. He talked of filing a petition in bankruptcy if he is |<sup>200</sup> pushed to the wall by his creditors, a list of whom I enclose. This list shows the amounts he owes. He | offers to settle with us on the basis of paying \$275 in full settlement, payable at | the rate of \$25 a month until the claim is satisfied.

I am satisfied that it is the | part of wisdom to accept this proposition. I believe that Mr. Anderson is a man of integrity and I have | no reason to doubt the sincerity of his expressed desire to do the right thing, but he is now in |<sup>300</sup> a position where he cannot do more than he has offered.

If you will accept his proposition, kindly notify me | to that effect and I will make definite arrangements with him.

Yours very truly, (334)

10

Mr. J. H. Woodward,  
President, Central Mfg. Co.,  
Detroit, Mich.

Dear Sir:

In re Central Manufacturing Co. vs. The Eastern Steamship Supply Co.

We have conferred with Mr. Wilson, president | of the Eastern Company, who stated that he had expected to have some definite word for us today but that | he had been unable to arrange a conference with the parties interested with him to discuss the situation and reach | a conclusion. He feels sure he will be able to arrange a meeting in two or three days and asked | us to wait until we hear from him.

Mr. Wilson was quite frank in explaining his company's position. He insists |<sup>100</sup> that the caps which have been shipped to them do not conform to the specifications and drawings. He states that | the caps were imperfectly cast and that your company was negligent in not having them properly designed and finished. He | claims that they devoted considerable time in their plant to refinishing those they have attempted to use so far. We | note in the correspondence which has passed between the Cleveland and Detroit offices of your company several statements that seem | to substantiate his claim that the caps were not made up as ordered.

We have formed the opinion from our |<sup>200</sup> conversation with Mr.

Wilson that his company will be able to present a very formidable defense if the issue is | permitted to go to court. It will be a difficult case to handle, and it is probable that all of | the material in your possession will have to be shipped to New York, and the caps and mountings they have | already installed will have to be dismantled and returned to you because the entire product will be required in evidence. | In the last analysis it would seem to us to be a question of fact for the jury to determine | <sup>300</sup> as to whether the material manufactured by your company conformed to the specifications, and this could only be done by | inspection.

You will also appreciate that we would be seriously handicapped unless we had Mr. Frost present to testify, as | a deposition by him probably would not carry as much weight as the oral testimony of Mr. Wilson. He claims | that it has cost them a great deal of money to have the mountings they received altered so they could | be adapted to their requirements. He also stated that the threads on the screws, even after they were altered, were | <sup>400</sup> not in accordance with the sample and that he can demonstrate to the court that they not only fail to | conform to the specifications, but that they cannot even be used successfully in their present condition. He further argues that | the screws are now too small to be re-threaded. Mr. Baker, of the New York office, says that our copy | of the specifications has been lost at

the Cleveland plant and this would probably handicap us.

After examining the various | parts we must confess that we cannot ourselves determine whether the material conforms to the specifications or not, and in | <sup>500</sup> our opinion the court and jury would be so mystified before the case was completed that the outcome would be | very uncertain. It is the history of litigation that courts and juries reach strange conclusions in cases involving technical engineering | problems. It is therefore impossible for us to forecast the result of the action, as the entire case resolves itself | into questions of fact and engineering technicalities. We believe that Mr. Wilson would impress the court as being honest, even | if he is mistaken.

Our opinion is that it would be much better to try to secure a settlement based | <sup>600</sup> upon some substantial concession to the Eastern people than to go to the expense and trouble of a suit. Before | you reach a final decision, however, we suggest that you wait until we report the result of Mr. Wilson's conference | mentioned above.

Very truly yours, (645)

11

F. W. Wood & Company, *Plaintiff*

vs.

C. W. Barker, *Defendant*

To the above-named Defendant:

TAKE NOTICE that the above plaintiff claims an indebtedness from you of Eighty-four Dollars | and

Fifty Cents (\$84.50). This amount has been duly demanded, no part thereof has been paid, and it is now due | and owing to the said<sup>27</sup> plaintiff.

NOW, therefore, you are notified that unless you remit in full or appear at | plaintiff's place of business, 410 W. Upland Street, South Bend, Indiana, on or before June 12, 1920, | and make payment of said claim or a satisfactory provision for the adjustment thereof, you will force us to instruct |<sup>100</sup> our local attorney to bring legal proceedings against you without further notice to recover the amount of the claim with | accrued interest, together with the costs and disbursements of the action.

You have had due notice and will be responsible | for the consequences of your failure to comply with this demand.

Yours truly, (153)

12

your unsettled account for.....  
with.....<sup>28</sup>  
has been assigned to us for adjust-

ment you have been informed by your creditor as to our method of disposing of delinquent accounts we shall now give you an opportunity to settle this claim before we proceed to advertise it for sale to the highest bidder in your immediate neighborhood or wherever we are most likely to find a buyer this account is recognized by law as an asset upon which the creditor is compelled to pay an annual tax and unless you make an effort to liquidate your indebtedness you will force us to offer it for sale if you cannot settle the account in full you surely ought to be able to pay part of it on account monthly payments will be acceptable if you can show that the claim is unjust or incorrect in any particular you are hereby notified to do so at once if we do not hear from you within ten days we shall proceed to advertise the account for sale and continue to do so until it has been sold at some price yours respectfully

## OFFICE TRAINING ASSIGNMENTS

In this section you are employed by the Fidelity Adjustment Company, Cleveland, Ohio. Your teacher is the manager and you are his stenographer. All your work will be done under his direction.

## TECHNICAL TERMS

Each trade, profession, and line of business has a terminology peculiar to itself. By studying carefully the shorthand outlines, spelling, and definitions of the technical terms given in connection with each section, you will add largely

<sup>27</sup> This letter is a formal demand notice to a debtor and is consequently couched in precise legal language.

<sup>28</sup> The blanks are to be filled in from information given in assignments 8 and 9, page 16.

to your vocabulary and will also be able to transcribe the letters dictated to you more intelligently and accurately. Refer to the list for the meaning of every term you encounter in your work.

**Assignment.** Make a typewritten copy of the technical terms (without definitions) on pages 3, 4, and 5. These expressions are frequently used in this business. Arrange the words double space in two columns. The shorthand outlines for these terms are given on page 371. In your shorthand note-book write the outlines for each expression at least five times. Hand in the typewritten list and your notes for inspection.

#### ARRANGEMENT

Since it is the finished product—the typewritten transcript—which comes under the eye of your employer, it is very important that you acquire skill in the artistic arrangement of the letter on the page. Use care and judgment in displaying the letter attractively. The margins on both sides and at the top and bottom of the page should be approximately equal. Cultivate an even uniform touch. A common fault is to strike the period and comma so heavily that the paper is pierced. All punctuation marks should be struck more lightly than the other keys. Make sure that the type on your machine is absolutely clean at all times. The letters *a, e, o, g, m, n, s, u,* and *w* easily become clogged with dirt and require special attention.

A number of methods of arranging a letter on the page are now sanctioned by business usage. The form illustrated by the style letter on page 2 is probably the most widely used. Study the details of the arrangement of this letter carefully, as you will write all letters in this section in the same form. It was dictated by Mr. Barton, the treasurer. His initials, "DEB," and those of his stenographer, "LFR," appear to the left of the signature. The initials of the dictator are always written first.

**Assignment 1.** In the Budget of Forms you will find three letterheads of the Fidelity Adjustment Company, marked "form 1." On the first sheet make a copy of the style letter, but use the current date and substitute the initials of the manager (your teacher) for those of Mr. Barton and your own initials for those of his stenographer. Write "Manager" instead of "Treasurer" below the firm name.

**Assignment 2.** Copy letters 2 and 3 on the letterheads provided in the budget. Always use the current date. In letter 3 you will find a reference to an enclosure. At the lower left-hand side of the page write the abbreviation "Enc." Write the initials below "Enc." Turn to the style letter on page 20 and observe this arrangement. Hand in the three letters for signature.

## CARBON COPIES

Every modern business office keeps on file copies of its correspondence for reference. Carbon copies are almost universally employed for this purpose. In some offices stenographers are instructed to make the carbon copy on the back of the incoming letter. Ordinarily, however, another sheet is used for the carbon copy, which is attached to the letter received. The advantages of the former practice are that it saves paper, and the correspondence takes up less space in the files.

In arranging sheets for carbon work, first lay the original sheet face down, place the carbon sheet next to it with the *glazed side up*, and the page which is to receive the carbon impression on top. Before inserting the sheets in the machine, be sure that the edges are even.

**Assignment 3.** Copy letters 4 and 7 with carbons. Use plain paper for this and the succeeding assignments in this section.

## FORM LETTERS

Letter 11 is a final "demand notice" sent out by our firm to debtors from whom we have been unable to collect. In sending out similar notices this form is used with the insertion of the proper names and amount.

**Assignment 4.** Make a copy of the notice without carbon. It is not necessary to retain a copy for our files since a memorandum that the form notice has been sent is a sufficient record.

**Assignment 5.** Write a similar notice (without carbon) to Frederick C. Ginn, 2125 Superior Ave., Cleveland, Ohio, against whom an account for \$96.50 has been placed in our hands by the F. W. Walker Company, whose address is 326 Duquesne Street, Braddock, Pa. Specify the date ten days from today as the last day on which payment can be made before suit is entered. Should this date be a business holiday, insert the date of the next business day. Before writing this letter be sure that you know who the plaintiff and the defendant are.

**Assignment 6.** We have also made numerous efforts to collect from the H. K. Marlin Company, Piqua, Ohio, the sum of \$146.50, which is owing to another of our clients, Mr. Henry L. Sanford, 321 Land Title Building, Cleveland, Ohio. Write a notice in this case, specifying the date fifteen days from today as the last on which the debtor may make payment before we enter suit.

Hand in the five letters and two carbon copies to the manager. If they are correct, he will sign the originals with his full name and the carbons with his initials. Keep the copies, which will be handed back to you, in your individual folder. The dictator initials the carbon copies in order to authenticate them and to indicate that they are ready for filing.

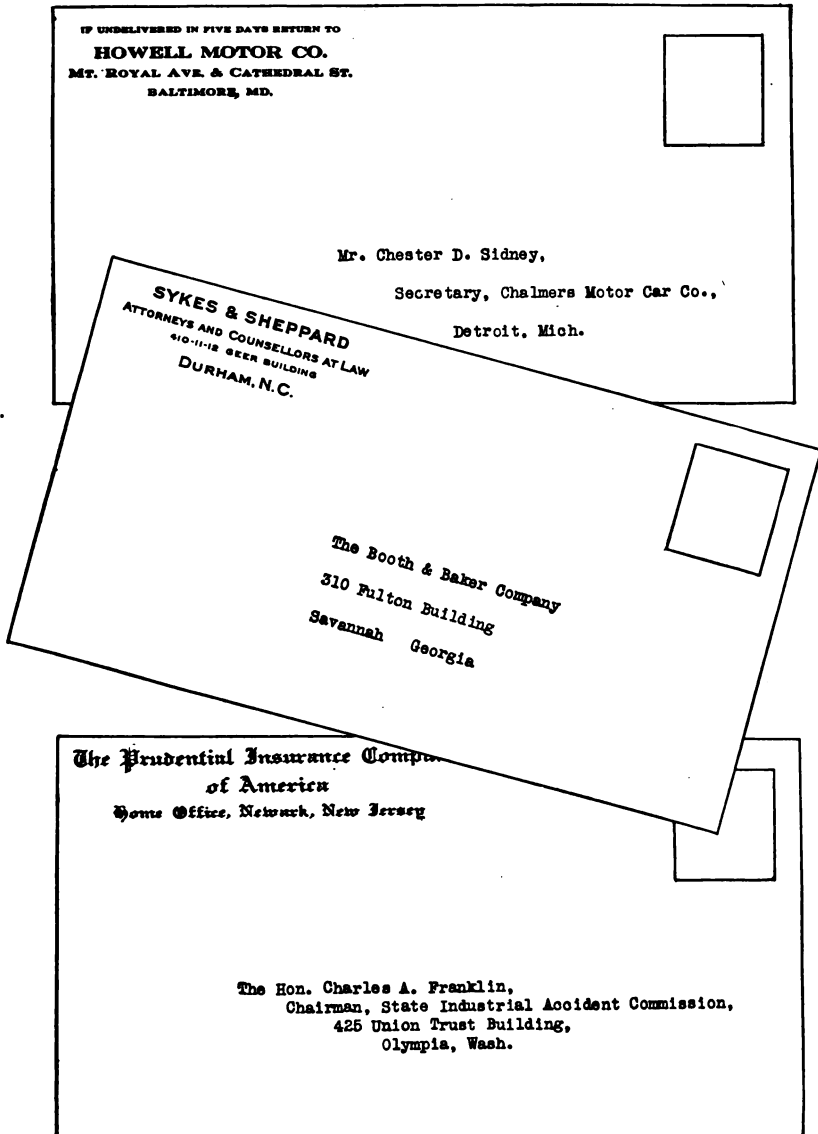


ILLUSTRATION 1—ADDRESSED ENVELOPES



## ENVELOPE ADDRESSING

The utmost care should be exercised in addressing envelopes. Thousands of letters go astray annually in the mails because of carelessness in writing the addresses. Study the arrangement of the envelope addresses on page 15.

**Assignment 7.** Address envelopes for the style letter and for letters 1 to 10. If envelopes are not available, use paper cut to envelope size. The ordinary commercial envelope is  $6\frac{1}{2}$  inches long by  $3\frac{1}{2}$  inches wide. Hand in the addressed envelopes.

## PUNCTUATION AND PARAGRAPHING

In your work as stenographer you will be continually called upon to apply your knowledge of English construction and punctuation. Such matters as proper paragraphing, punctuation, and capitalization will be left largely to you.

Letter 12 is set solid, without paragraphing, punctuation marks, or capitals. Read it through and decide upon the punctuation and paragraphing. After the insertion of the proper amount and the name of the creditor company, this letter is sent out to the debtor whenever a new account has been placed in our hands. It is another form letter.

**Assignment 8.** The Morrison Importing Company has placed with us an account for \$136.75 against Mr. H. Y. Carroll, 538 Concord Building, Xenia, Ohio. Write him a copy of letter 12 with carbon.

**Assignment 9.** The American Steel & Wire Company has also placed in our hands an account for \$572.50 against the Fleming Terra Cotta Company of Steubenville, Ohio. Write a similar letter with carbon to this company.

**Assignment 10.** Address envelopes for both letters. Slip each letter under the flap of its accompanying envelope and hand in for inspection. After the letters have been signed, fold and insert them in the envelopes, and place in the outgoing mail basket. Keep the carbons in your folder.

In preparing a letter for insertion in the envelope, first fold over the lower half within one-half inch of the top edge of the sheet; now fold the left side over about one-third of the width; fold the right side over a little less than one-third; insert the letter in the envelope with the flap facing you.

## TRANSCRIBING

Taking dictation and transcribing it are vitally important parts of your work. With your notes before you, first determine the amount of typewriting space that will be required for the letter. Apply the principles of effective display. When you are ready to transcribe, read the entire address of the letter from your notes before transcribing it. Now read through the first sentence, mentally determining upon the punctuation as you go along; then transcribe this sentence.

Proceed in your transcribing, sentence by sentence, in this way. After a little practice you will be able to transcribe by reading your notes a few words ahead. Until you acquire that ability, however, read through each sentence before attempting to transcribe it.

**Assignment 11.** The manager will dictate to you five letters from the correspondence of the Fidelity Adjustment Company. Transcribe these letters, with carbons, using the current date. Remember to add the initials. In case there is a reference to an enclosure, add the abbreviation "Enc." as instructed in Assignment 2. Address envelopes for the letters.

Hand in your transcripts. When the letters have been signed by the manager, insert the originals in the envelopes and place in the outgoing mail basket. Retain the carbon copies in your individual folder.

### FILING

An important part of a stenographer's equipment is a practical knowledge of the various methods of filing. Every business house files its correspondence and other important papers according to some definite plan. Just what plan should be used in any given office depends largely on the nature of the business and the character of the correspondence.



ILLUSTRATION 2—BOX FILE AND INDEX

In handling business situations it is continually necessary to refer to previous correspondence bearing on the matter in hand. Economy of time and effort results when all correspondence to and from an individual or firm is kept in one place. The object of filing, then, is to make correspondence and papers readily accessible when needed. A letter which is put in the wrong place in the files cannot be located and for all practical purposes is lost.

From the mechanical point of view the simplest method of keeping correspondence and papers so that they may be easily located is by filing them in a "box file" like that shown in illustration 2.

Within the box is a set of manila sheets stapled or otherwise fastened at the back. At the side of each sheet there is a projection called a tab on which

a letter of the alphabet is printed. Comparatively few names begin with I and J; consequently both letters are frequently printed on one tab. The same holds true for U-V and X-Y-Z.

In filing the letters of an individual in the box file, simply note the first letter of the last name and place the letter under the manila sheet with the corresponding tab. Thus the carbon of the letter to Allan E. Young, Esq., should be filed under the sheet with the X-Y-Z tab. In the case of a firm name such as The A. W. McCloy Company, the word "the" is disregarded and the letter is filed under the sheet with the M tab. Letters addressed to an official of a company should always be filed according to the *firm name* and not the name of the individual; thus the letter to Mr. K. H. Masters, Secretary of the National Cloak Company, is filed under the sheet with the N tab.

**Assignment 12.** File the carbon copies of the letters in your folder in a box file.

#### SECRETARIAL PRACTICE

To be an efficient private secretary one must not only be a well-qualified stenographer, but must possess those mental and moral characteristics required by the confidential duties associated with the position. The technique of shorthand and typewriting and the routine of business offices may be mastered by the average individual without great difficulty, yet faults of temperament or personality may render one unfit to hold a secretarial position.

The private secretary, in the first place, must realize that the information he acquires in the course of his association with his employer is confidential—that under no circumstances may he discuss the business affairs of his chief with outsiders. The secretary must have a good memory, particularly for details, so that he may be able to supply his employer promptly with information which he needs in arriving at executive decisions. Indeed, the secretary's most important function is to conserve the time and energy of his employer. Ordinarily he must act as a "buffer" between his chief and the outside world. His skill in dealing with callers is the supreme test of his tact and resourcefulness.

The employer will often have occasion to give instructions. At such times the secretary needs to concentrate his attention wholly on the matter in hand in order that he may get a definite understanding of just what is to be done. The secretary should take notes of such instructions, putting down all the details and noting exactly what his employer expects him to do.

**Assignment 13.** The manager calls you into his office and gives you the following instructions: "I had a conference with Wilson of the Eastern Steamship this morning, (see letter 10) and I will be going up to Detroit tomorrow night to see the Central Manufacturing people. I wish you would get me their file. Write to Mr. Woodward and tell him I'll be up. You might write Mr. Frost, too. Frost is the general manager, you know. And by the way, get me a berth on the 9: 40."

Make notes of these instructions. Have you put down all the important items? Write the two letters, adding "Secretary to Mr. \_\_\_\_\_" (your teacher) under the complimentary close. Sign and mail the letters.

**Assignment 14.** The manager: "I wish you would look up for me the legal rates of interest in these states: Alabama, Nevada, Oregon, Texas, and Idaho. Make a little memorandum and put it on my desk." (This information can be obtained from a commercial law text.)

**Assignment 15.** The manager: "Here's a court notice that the Rodney Calcium hearing (see letter 6) has been brought forward to the 21st. Wire Douglas & Becker telling them about this and asking them to let us know if they are willing to settle on the basis of one of the propositions given in our last letter, or if they want us to go ahead with the suit." (Read the information about telegrams given on page 237.)

**Assignment 16.** The manager: "Here is a letter with some papers from The H. M. Rowe Co., Baltimore. They ask us to take a claim. Write the facts to our Baltimore representative, R. F. Melton, Esq., 214 E. Lexington St., asking him to look into the matter and report to us within a week or ten days. Write the Rowe Company also, telling them we will take the claim and notifying them of the action we have taken. I'll sign the letters."

After studying the papers you find the following to be the facts as stated by the Rowe Company: In June 19—, J. D. Lee, a freight solicitor for the Western Maryland Railroad, called upon our client and explained that his company was running special through freight cars to the West. In July, the Rowe Company had a large shipment for the Salt Lake City Board of Education. This shipment had to reach Chicago within eight days to be included in a carload of books which the Macmillan Company was making up for the Board. Our clients arranged with Mr. Lee to ship by Western Maryland to Chicago, and the order was forwarded on July 19. The shipment was lost in transit between Baltimore and Chicago and could not be located, although Mr. Lee telegraphed to every transfer point between the two cities. The Macmillan Company waited until July 29 and then forwarded its carload to Salt Lake City. The Rowe Company waited until August 18 for information about the lost shipment. On that date they telephoned Mr. Lee that as the books had to be in Salt Lake City on September 2, the day schools would open, they would have to duplicate the shipment by express and would expect the railroad to reimburse them for the express charges. Mr. Lee asked for two more days to locate the shipment, but failed to do so. He then authorized the Rowe Company to duplicate the shipment by express and file a claim with his company for the express charges, which amounted to \$181.57, the Rowe Company reserving the right to make claim for the lost books if they were not found. This was done but the claim has never been paid, although the railroad company upon inquiry stated that it was in process of settlement. Last week when our clients telephoned them again, they said the claim papers had been lost.

# J. K. RISHEL FURNITURE COMPANY

MANUFACTURERS OF

**DINING AND BED ROOM SUITS**

**DINING TABLES**

**WILLIAMSPORT, PA. February 24, 1920.**

FACTORIES  
WILLIAMSPORT, PA.  
HUGHESVILLE, PA.

Messrs. Bailey & Walton,  
176 Main Street,  
Pottstown, Pa.

Gentlemen:

In reference to your order for a #2764 suit specified in 1572 Blue Velour, we regret to say that we are temporarily out of this covering and do not know just when we shall receive another shipment of it, because of the scarcity of dye stuffs.

Under the circumstances, we enclose samples of #1583 Blue and #1588 Blue, either of which we can furnish if they will answer your requirements. The 1583 lists in the same grade as the 1572 which you specified; the 1588 lists in the P grade.

It may interest you to know that we have materially changed our upholstering processes. Each piece is now upholstered entirely by a single workman to eliminate piecework and its resulting divided responsibility. On all pieces the springs are sewn over a stout webbing and are then tied into a complete seat in which each spring shares every strain. The springs are of the highest grade tempered steel. Burlap covers this foundation. Fine, clean, springy moss is piled as high as the arms and quilted with burlap into a very compact layer; then a second covering of moss with a layer of felted hair and a layer of inch thick cotton is applied to make the double stuffed or second seat, resulting in a construction which is impervious to spring marks. A rough covering of durable denim is then applied, and the piece is ready for the final covering of fine upholstery. From this time on, all settee pillows and back cushions will be reversible.

The suit ordered will be upholstered in the above manner. Kindly wire us on receipt of this letter which one of our substitute selections for the covering will be satisfactory.

Yours truly,

J. K. RISHEL FURNITURE CO.  
*J. K. Stewart*  
Assistant Sales Manager

Enc. 2  
JKS-MWJ

## FURNITURE SECTION

### TECHNICAL TERMS

- antique**—belonging to former times, as contrasted with modern; applied to furniture modeled after the styles of former times.
- bevel-edged**—applied to mirrors, etc., the edges of which are slightly sloped around the four sides.
- bird's-eye maple**—the wood of the sugar maple when full of little knotty spots somewhat resembling birds' eyes.
- brad**—a slender flat nail, having instead of a head a slight projection on one side.
- buffet (boo-fa')**—a sideboard designed to hold china, plate, etc.
- bureau**—a chest of drawers commonly made with an adjustable mirror.
- burl**—a term applied to wood which has small knots in it, used for ornamental veneering.
- burlap**—a coarse heavy material made of hemp or manila and used for wrappings and in upholstery.
- caster**—a small wheel or swivel attached to the leg of a piece of furniture in order to facilitate moving about without lifting.
- cheval glass (she-val')**—a looking-glass mounted so as to swing in a frame, large enough to reflect the whole figure.
- chiffonier**—a case of drawers resembling a bureau, but higher in proportion to its width and sometimes not provided with a mirror.
- chiffonette**—a small chiffonier.
- chifforobe**—trade name for a piece of furniture which is a combination of a chiffonier and a wardrobe.
- Circassian walnut**—trade name for the wood of the English walnut when manufactured into furniture.
- console table**—a table which, instead of straight or nearly straight legs, has legs very much curved.
- corrugated matting**—a floor covering made of some coarse material such as hemp, bamboo, etc., and bent or drawn into parallel furrows or ridges.
- crash**—a strong coarse linen fabric.
- cretonne**—a cotton cloth printed on one side with patterns and used for covering furniture, etc.
- dado border**—an ornamental rug border.
- damask**—a material used for furniture covering, made of silk and wool or silk and cotton, and finished in elaborate designs.
- davenport**—a large sofa or settee, often convertible into a bed.
- denim**—a colored twilled cotton material.
- dowel**—a wooden or metallic pin used for fastening together two pieces of wood.
- escritoire**—a writing desk.

- fumed oak**—oak which has been subjected to a process of fuming or smoking in order to obtain an antique appearance.
- glider**—an attachment to the legs of pieces of furniture to facilitate moving about.
- golden oak**—trade name for wood secured from the canon live-oak, an evergreen oak found on the Pacific coast.
- helical**—applied to springs which have a spiral construction.
- hygienic**—sanitary.
- kiln-dried (kil)**—deprived of moisture by treatment in a furnace.
- linoleum**—a kind of floor covering made of linseed oil on a base of coarse canvas and hardened to a dense, rubber-like consistency.
- linters**—short fibres of cotton taken from the cotton seed in the second ginning.
- madras**—a thin cotton cloth, generally figured.
- mission**—trade name for a kind of dark, stained furniture, usually made of ash-wood, characterized by great plainness and solidity, and the prevalence of straight lines.
- mohair**—a kind of black cloth sometimes used for furniture covering.
- mortise and tenon joint**—a joint which is formed by making a hollow cut (the mortise) in a piece of wood to receive a corresponding projection (the tenon) formed on another piece in order to fit the two together.
- motif**—the central idea, such as a color scheme, which is emphasized in the furniture of a room.
- oxidize**—applied to metal surfaces treated with acids so as to produce a dark or shadowy effect.
- ply**—a fold or thickness; used in composition (as 2-ply, 3-ply, etc.) to designate the number of thicknesses or twists with which anything is made.
- poplin**—a fabric having a silk warp; occasionally used in furniture making.
- porcelain**—a kind of glazed ware.
- portieres**—heavy curtains.
- replica**—something made in exact likeness of an object.
- scrim**—thin strong cloth, cotton or linen, used in upholstery for linings, or for window hangings.
- seasoned**—dried or hardened so as to be brought into a state for manufacture (applied to timber).
- settee**—a sofa.
- sheathing**—anything which covers or protects an object.
- spinet desk**—a small light desk.
- suite**<sup>1</sup>—a set of various pieces of furniture intended to be used together and harmonizing in color, finish, etc.
- tapestry**—heavy woven or figured cloth.
- tempered**—applied to the state of a metal, particularly as to its hardness.
- ticking**—a strong material made of linen or cotton.
- tuna mahogany**—trade name for a particular kind of mahogany finish.

<sup>1</sup> Also spelled *suit*, plural *suits*. Usually pronounced *sūit* by the trade. *Sweēt* is also correct.

- upholster**—to provide with textile coverings together with cushions, stuffings springs, etc., as a chair or sofa.
- velour**—a textile fabric having a thick soft velvet-like nap.
- veneer**—to overlay an inferior wood with a wood of a finer or more beautiful kind, so as to give the whole the appearance of being made of the more valuable material.
- vulcanized**—a term applied to rubber which has undergone a hardening process.
- warp**—the threads which extend lengthwise in the weaving process, as distinguished from the *woof*, the threads of which cross the warp.
- weathered**—exposed to the air so as to be thoroughly seasoned (applied to timber to be manufactured into furniture). *Weathered oak* is oak so treated.
- webbing**—a heavy woven material.

## PERIOD FURNITURE STYLES

|                    |                  |
|--------------------|------------------|
| American Colonial  | Louis XIV        |
| Chippendale        | Louis XV         |
| French Renaissance | Louis XVI        |
| Gothic             | Old English      |
| Heppelwhite        | Queen Anne       |
| Jacobean           | Sheraton         |
| Louis XIII         | Tudor            |
|                    | William and Mary |

## ORIENTAL RUGS

|            |
|------------|
| Kermanshah |
| Kirman     |
| Mahal      |
| Senna      |
| Serabend   |

## CORRESPONDENCE

1

Mr. J. K. Rishel,  
Pres., J. K. Rishel Furniture Co.,  
Williamsport, Pa.

Dear Mr. Rishel:

I inadvertently<sup>2</sup> happened upon an article the other day that I think supplies the material for a | very attractive booklet, which will be of interest not only to the furniture purchaser but of considerable value to our | salesmen.

This article gives a synopsis<sup>3</sup> of the types of furniture used in the various periods of English and French | history, with brief descriptions and notes by which the different period designs may be identified. In chronological<sup>4</sup> arrangement it considers | the Tudor, French Renaissance, Louis XIII, Louis XIV, Louis XV, Louis XVI, Old English and Gothic, Jacobean, Queen Anne, William |<sup>100</sup> and Mary, American Colonial, Chip-

<sup>2</sup> That is, by chance.

<sup>3</sup> A general description or summary.

• <sup>4</sup> That is, in order of time.



pendale, Sheraton, and Heppelwhite designs, with brief notes of historical interest. It also gives a short | sketch of the lives and works of Chippendale and Heppelwhite.<sup>5</sup>

My purpose in writing is to ascertain whether you would | favor the publication of such a booklet. I like the idea and if you are favorably impressed with it, I | will prepare the manuscript and submit it to you. If it is properly illustrated, I think it will render a | very distinct and valuable service to our field people.

Sincerely yours, (191)

2

The Royal Furniture Company,  
568-574 Cedar Avenue,  
Sheboygan, Wisconsin.

Gentlemen:

We have been informed by Mr. H. T. McBride, treasurer of the firm of James Friend & Son of | this city, that there is a carload of your furniture here in Pittsburgh on consignment to them which they | cannot use, and which you accordingly desire to dispose of quickly to some other purchaser.

We understand that the furniture | consists mostly of odd pieces. Not having an itemized list or illustrations, we request that you send us catalog cuts | or blue-prints, together with your price list and a copy of your invoice prices to Friend &

Son. We |<sup>100</sup> shall not consider any quotations which are not at least 33 $\frac{1}{3}$ % off your net | invoice prices. As you undoubtedly know, we can buy all of the exhibit samples we care to stock at this | discount.

The Royal Furniture Company is unknown to the buying public of Pittsburgh as a factor in the merchandising of | furniture; therefore the name of your company is worth nothing to us as an advertising feature. When you mail your | proposition, please send us also an order on Friend & Son for the goods covered by the memorandum invoice or |<sup>200</sup> estimate you send us.

Yours very truly, (207)

3

Mr. W. J. Showers,  
Pres., Armstrong Furniture Co.,  
Bloomington, Ind.

Dear Sir:

We shipped today by C & N<sup>6</sup> fast freight one carload consisting of your initial order of Simmons | metal beds and Slumber springs. We enclose duplicate bill of lading.<sup>7</sup>

Briefly, the salient<sup>8</sup> features of our product upon which | stress should be laid by your salesmen in presenting these beds and springs to the public are:

The Simmons metal | bed is noiseless because it locks firmly at the corners. The patent corner locks

<sup>5</sup> Sheraton, Chippendale, and Heppelwhite were famous English cabinet makers and furniture designers.

<sup>6</sup> See page 88. The periods are often omitted from the abbreviations of railroads.

<sup>7</sup> An illustration of a bill of lading will be found on page 217. Duplicate bills of lading are sent to consignees to enable them to have shipments traced from their end of the line in case of delay.

<sup>8</sup> Prominent; outstanding.

are made of pressed steel and | have much longer and broader bearing surfaces than the joints on the average bed. They fit firmly and snugly, giving |<sup>100</sup> the bed the rigidity of a solid piece. They are absolutely free of creaks and rattles.

The Slumber spring presents | a new idea. It is made of an ingenious combination of elastic steel strips with spirals of high-test spring | wire assembled so that the spring action is equal in all directions. The spring is finished in oxidized

silver and | is therefore rust-proof. It has no loose ends or rough corners and cannot wear or tear the ticking. It | yields to the weight of the body but supports it evenly. It does not sag or hump and makes a |<sup>200</sup> firm foundation for the mattress.

Mr. Johnson will be in Bloomington on March 25 to assist your salesmen in | introducing the Simmons line. You may depend at all times upon our hearty co-operation <sup>9</sup> in the marketing of our product. <sup>10</sup> |

Yours truly, (242)

4

Abbott Furniture Co.,  
346-352 W. Plymouth St.,  
New Castle, Pa.

Gentlemen: .

We have a few short lengths of Extra Heavy Corrugated Matting similar to the sample enclosed. We have grouped | them into three rolls as follows:

|                          |               |
|--------------------------|---------------|
| Roll #1—24 and 38 yds..  | Total 62 yds. |
| " #2—27, 19, and 13 yds. | " 59 "        |
| " #3—28 and 32   yds.    | " 60 "        |

We offer these rolls to you, subject to prior sale, at 90¢ per sq. | yd., f.o.b. your city.<sup>11</sup> This matting is not only extra heavy (measuring about 5/32" |<sup>100</sup> thick), but is our best grade—Government Standard.

We have heard nothing from you in response to our recent | offer to send you a sample dozen of our #1 Pure Rubber Mats. The experience of the trade has | been that purchasers of rubber mats are willing to pay a fair price for a good article. Our #1 | mats are made of pure rubber, extra heavy, are 18" x 30", and weigh 8 lbs. each. We | guarantee that they will not grow hard or crack with age.

<sup>9</sup> This word is written both with the hyphen and without. Both forms are shown in this book.

<sup>10</sup> While the primary purpose of this letter is to notify the customer that his order has been shipped, the writer takes the occasion to point out those features of his product which should be emphasized by the customer's salesmen in their "selling talks."

<sup>11</sup> See footnote 24 on page 8. Who will pay the transportation charges in this case?

We should like very much to send you a <sup>200</sup> sample dozen and quote you \$12 per dozen, f.o.b. Philadelphia. On the sample dozen, however, we shall pre-pay the freight, and if on examination you do not find the mats satisfactory you may return them at our expense.

Yours very truly, (244)

5

Mr. F. E. Henderschott,  
Bryn Mawr, Pa.

Dear Mr. Henderschott:

If you have not purchased the bedroom suite you wished to obtain a few weeks ago, we should like to have you visit the store any day next week to see a new suite we have just added to our line.

It is a 7-piece suite with a full size double bed, single mirror bureau, triple mirror dressing table and bench, gentleman's chifforobe, rocker, and straight back chair. A choice is offered in solid mahogany, genuine American walnut, golden oak, bird's-eye maple, or old ivory finished on solid mahogany in the Queen Anne or Louis <sup>100</sup> XVI period designs. This suite is a Hawkes product, and for finish and construction it is by far the most artistic and satisfactory suite we have ever offered.

You may have a chifforette in place of the chifforobe if you prefer it. The bed is fitted with a De Luxe bed spring, the leading spring in the crossed helical tied method of construction, which makes a wonderfully comfortable bed. This mattress is made under the strict Ohio State laws and therefore answers all requirements as to hygienic conditions. The bed may be fitted with

a box spring and mattress if <sup>200</sup> you prefer that combination.

The prices of this suite, according to the different woods and finishes, range from \$425 to \$650. If you are interested in it, I shall take great pleasure in showing it to you if you will call.

Yours sincerely, (250)

6

Mrs. Henry F. Palmer,  
231 N. Luzerne Ave.,  
Richmond, Va.

Dear Madam:

During your visit to the store yesterday, I intended to show you the Sellers Kitchen Cabinets, but as you were evidently in a great hurry I decided to invite you in to see them the next time you are down town.

I want you to see the Mastercraft model at least. It has the automatic lowering flour bin (with flour sifter), which eliminates climbing on chairs and dangerous lifting and straining when filling the bin. The automatic base shelf extender brings the pots and pans within easy reach when the lower cupboard doors are open. The porcelain worktable <sup>100</sup> is a feature every woman wants. The patented ant-proof casters prevent vermin from crawling up into the cabinet.

It is built of carefully finished, well seasoned hardwood. Every joint and corner is glued and blocked. The cabinet interior is of baked-on white enamel. It has dust-proof and vermin-proof drawers, metal lined bread and cake drawers, with sliding metal lids, nickel-aluminum utensil racks, glass spice and sugar jars, and many other features that make for economy, satisfaction, and service.

This cabinet is 48 inches in width and easily accommodates from 300 to 400 articles, the entire kitchen utensil equipment of most families. You can do practically all of your work right at the cabinet, which saves every needless step, every unnecessary bit of labor, and every possible moment of time.

I hope to have the pleasure of demonstrating its many advantages to you in the near future.

Respectfully yours, (257)

7

J. R. Donaldson & Co.,  
1617 Arch Street,  
Dayton, Ohio.

Gentlemen:

We acknowledge with thanks your remittance in the sum of \$106 covering our invoice<sup>12</sup> of September 29.

Suite #290 is probably the most satisfactory fumed oak living room suite for you to carry to retail at \$75 or thereabouts. It consists of a settee, an arm chair, a rocker, and a 34-inch library table. The

frames are very strongly constructed. The spring seats are upholstered in a good grade of imitation leather.

Most manufacturers of fumed oak use colored shellac varnish in finishing, with the result that when a piece is damaged the shellac must be removed in the refinishing process, which consequently removes practically all of the color. However, this suite is finished by an entirely different process.

We secure our fumed finish by first subjecting the wood to the fumes of strong ammonia in an airtight room, and then chemically produced colors are applied and allowed to dry thoroughly. The color is therefore in the wood before the shellac varnish is applied, so that when the varnish is damaged the color still remains and repairs can be easily and satisfactorily made. We hope to receive your order for a number of these suites.

We regret to inform you that we are unable to continue our previous arrangement as to freight allowance. Undoubtedly you are aware of the fact that lumber, cotton lintens, steel angles, and steel wire have advanced very considerably above their former prices. It follows that our manufacturing cost has advanced proportionately. In order to cut down our cost of doing business to as small a margin as possible, we will in the future make shipments f.o.b. factory.<sup>13</sup>

Very truly yours, (289)

<sup>12</sup> See the specimen of an invoice on page 71.

<sup>13</sup> That is, the customer will have to pay the transportation charges.

8

Mrs. Mildred Willard,  
1914 N. Fulton Ave.,  
Haverhill, Mass.

Dear Madam:

The rug gives the keynote of color for every room in the house. You choose the color in | the rug you wish to develop—to emphasize—and leaving the other colors as a soft background, you begin to | think about hangings and slip-covers to harmonize. However, the rug is always the motif.

With this fact in mind, | we want you to see the large assortment of designs, grades, and colors in rugs for summer which we will | place on sale April 2. The very suggestion you are waiting for may be offered by some soft natural color | <sup>100</sup> woven into the pattern or other combination in these beautiful rugs.

We have in stock Rattania Fiber Rugs, highly vulcanized, | that can be very easily cleaned with a non-alkali soap and water; Neenah Fiber Rugs of solid colors, the | only decorations being dado borders; and De Luxe and Deltex Grass Rugs of finest quality, introducing a two-tone effect | by the use of two colors in the warp. There are also Colonial and Grandmother Rag Rugs, and some old-time | Hook Rugs which in colonial times were always found before the grandfather clock. A wonderful selection is offered in | <sup>200</sup> Wilton and Scotch Art Rugs.

As a special feature of the sale, we have a number of Bengal repro-

ductions of | Oriental Rugs which are exact replicas of some of the very best types of hand-woven rugs. Made carefully, much of | the work done by hand, they reproduce the coloring, pattern, surface, and rich finish of such Oriental rugs as the | Kermanshah, Senna, Mahal, Serabend, and many others.

In connection with the rug sale we will also offer a large selection | of high-grade fabrics, curtains, and light-weight portieres, including gorgeous cretonnes, ruffled Swiss curtains, stenciled crash, plain-color poplins, | <sup>800</sup> block scrims, and madras.

We trust we may have the pleasure of seeing you at our store during this sale. |

Yours very sincerely, (323)

9

Mr. James C. St. Clair,  
1021 Addison Ave.,  
Louisville, Ky.

Dear Sir:

We are now ready to show our patrons the 10-piece dining-room suites I told you we | had coming in when you called upon us recently. I wish to show you in particular the following three suites: |

A Queen Anne genuine burl walnut suite with 48-inch extension table, having three extra leaves, a china closet, | a buffet, a serving table, and five side chairs and one arm chair, with genuine leather seats. The price of | this suite is \$375.

A rich antique brown solid mahogany suite in the William and

Mary |<sup>100</sup> period design with the same pieces as the above suite except that you have the option of a 54-inch | table if you prefer it, and the chairs have spring seats. This suite sells at \$425. |

An American walnut suite in Queen Anne design with the same pieces as the above suites for \$350. |

The carvings on all of these suites are genuine hand-chiseled by skilled artists. None of the carvings | are tacked on or stamped, but are chiseled out of the solid wood of the frames. In depth of carving |<sup>200</sup> and excellence of construction and finish these pieces are unsurpassed. Rare individuality is expressed in the turning of the mirror | frames and other ornamental features.

In all of the heavy pieces in these suites, the mortise and tenon pin joint | is used, which when glued makes a joint that is absolutely solid. Dust-proof panels are fitted under all drawers. | The china closet may be had with inside of wood or with mirror backs and plate glass shelves. In order | to protect the surfaces of tables, buffets, etc., many of our customers are having them fitted with plate glass tops, |<sup>300</sup> which we can supply with these suites. If you prefer two arm chairs and four side chairs instead of the | other combination, we can supply the extra arm chair.

I trust you will come to see these beautiful suites.

Yours | very truly, (342)

10

The Minch & Eisenbrey Co.  
218 W. Lexington St.,  
Meriden, Conn.

Gentlemen:

Some information as to our manufacturing processes may be of interest to you in connection with the proposition of | becoming the representatives of Rishel furniture in your city.

We use only the highest grade lumber, selected under the rules | of the National Hardwood Lumber Association. It is air-dried for at least one year before it is kiln-dried, | so that after being manufactured into furniture it will not be affected by climatic conditions. After being air-dried for | one year, it is saturated with live steam. The air-drying and steaming kill all plant life, which is the |<sup>100</sup> enemy of perfect glue joints. After being steamed, the lumber is thoroughly dried in our kilns, which takes from four | to six weeks. It is next allowed to stand for about two weeks before being worked into furniture, so that | it will adjust itself to the natural moisture in the air. This is a necessary precaution, as the bone-dry | lumber coming into contact with outside air from the superheated kilns has a tendency to swell slightly, which should be | completed before it is put in process.

Glue is an important item and only the very best hide stock joint |<sup>200</sup> glue is used. All other materials used, such as screws, brads, nails

dowels, casters, stain, filler, shellac, varnish, and upholstering | materials are of first quality, as we do not believe in sacrificing quality in order to make a low price. |

It is well that you should know something relative to the equipment of the Rishel factory, as it has a | direct bearing on the quality and price of our product. There is no more complete woodworking plant in the United | States. All machines are individually motor-driven. The current is generated by us, and light is furnished workmen during dark |<sup>300</sup> hours by 100 watt tungsten lamps, with reflectors, and placed but ten feet apart each way. All machines are | of the latest types, and we have many special machines manufactured under our own direction. For instance, we use a | specially designed hollow chisel mortise machine which will cut a mortise in a fraction of the time in which it | can be done by hand, and at the same time turn out a better finished product. A bit revolves rapidly | inside a hollow chisel which at one operation will cut a two-inch square hole through four inches of solid |<sup>400</sup> white oak. This supersedes the method of olden craftsmen who used brace and bit, chisel and mallet. By using such | modern machinery and keeping it in perfect condition by skilled mechanics who have no other duty, you will realize that | we secure maximum production and absolute uniformity.

We await your decision on our proposition with very great interest.

Yours sincerely, | (460)

11

Dear Madam:

On Monday, the 31st of July, the annual

AUGUST FURNITURE SALE opens at Wanamaker's. Each season brings | a larger response to these events, the natural result of the variety, values, and service that they give our customers. |

The real store serves. It is the agent of its customers in gathering merchandise of satisfactory sorts and bringing it | to the customer at a fair brokerage for finding the goods. This ideal of merchandising breathes the spirit of fairness, | and the business grows because the store serves.

Large operations have brought fine values for this furniture sale. In a |<sup>100</sup> nutshell, we have

\$40,000 worth of bedroom furniture

\$50,000 worth of living-room and parlor furniture |

\$65,000 worth of dining-room furniture

\$75,000 worth of miscellaneous furniture

to sell at | a full third below today's values. The furniture gathered for this sale cannot be accommodated in the store, although there | are three acres of show-rooms. You will see samples and a few duplicates, but the bulk of the stock will | be at the

warehouse at 21st and Market Streets and in cars on side tracks when the sale starts. <sup>200</sup>

There are six hundred extension tables among the dining-room furniture, \$28,000 worth to be sold for | \$18,000. We secured from one famous manufacturer \$48,000 worth of bedroom furniture to sell for | \$36,000.

In this sale there is a complete line of medium and high-priced fine quality breakfast-room | suites, bedroom suites, dining-room suites, library and hall furniture, china closets, sideboards, buffets, library tables, serving tables, chifforobes, | chiffoniers, dressers, davenport, wood and metal beds, rockers, chairs, spinet desks, console tables, tea wagons, shaving stands, knitting stands, and | <sup>300</sup> hall mirrors. All of the favored woods are included—Mahogany, Tuna Mahogany, Circassian Walnut, Oak, Bird's-eye Maple, Birch, etc. | There is also a beautiful collection of reed and willow furniture.

This furniture presents many new patterns in upholstery, with | striking color combinations in a large assortment of art velvets, verdure tapestries, damasks, velours, figured mohair, and hair cloths.

Every | piece in this sale is offered at a reduced price and is so tagged. We have never before offered to | our friends such an opportunity as this sale affords. We hope to see you at the store during the course | <sup>400</sup> of this sale, to which you are most cordially invited.

Very truly yours, (413)

12

we have your inquiry of . . . . .  
 . . . . . regarding dressers it comes at an opportune time because we are just now making up in one cutting 4,000 dressers of the type illustrated by the enclosed cut we are running these as a special inducement for new customers and as an incentive for our our regular customers to increase their business with us by marking them at an unusually low price before stating the price however we request you to note carefully the special features of this dresser it is made of solid indiana oak by our well-known angle-brace method of construction the drawer bottoms and case backs are made of three-ply built-up veneers the drawers are finished inside and out the dresser is finished in either waxed golden oak or standard fumed oak the base measures 20 x 40" and the beveled mirror is 22 x 26" the dresser is crated in southern cork pine each piece being complete in the crate every dresser is fully representative of the indestructible rishel line we will deliver these dressers at the very low price of \$14.95 each net 30 days<sup>14</sup> f o b factory you can dispose of this stock at a considerable saving to your customers and as a sale leader it offers you a splendid opportunity naturally this stock will move quickly and as we will fill orders as they are received it will be to your advantage to make provision for your requirements immediately very truly yours

<sup>1</sup> The dressers must be paid for at the full price within thirty days, no discount being allowed.



## OFFICE TRAINING ASSIGNMENTS

Your teacher is the sales manager of the J. K. Rishel Furniture Company, Williamsport, Pa., by whom you are employed in this section.

## TECHNICAL TERMS

**Assignment.** Make a copy of the technical terms and practice their outlines, as previously instructed. On a separate sheet copy the names of Period Furniture styles and Oriental rugs. Hand in your work.

## ARRANGEMENT

The arrangement of the style letter on page 20 illustrates a very common form for full page letters. The second line of the address is indented five spaces from the margin of the letter and the third line ten spaces. When letters are written single space, a double space should always be left between paragraphs. The signature "J. K. Rishel Furniture Co." is written in such a way that it extends an equal number of spaces on both sides of "Yours truly." Observe how the title "Assistant Sales Manager" is placed. Be careful in handling the details of letter arrangement. Make each letter you write an artistic achievement in which you can take real pride.

**Assignment 1.** Copy the style letter with carbon on a letterhead of the J. K. Rishel Furniture Co. (form 2). Use the current date and your teacher's initials and your own. Address an envelope for the letter.

**Assignment 2.** Copy letters 1 and 7 with carbons on the other letterheads provided in the budget and address envelopes. When the letters have been signed, fold and insert them in the envelopes, and place in the outgoing mail basket. Retain the carbons in your folder.

## SALES LETTER

Letter 11, page 30, is a Wanamaker sales letter. It is an unusually good example of "salesmanship on paper." Read the second paragraph carefully and observe how the writer stresses the idea of "service" as the fundamental reason for the store's existence.

**Assignment 3.** We wish to send copies of this letter to three of our distributors who are going to conduct similar sales. Copy the letter with two carbons. This will be a full page letter. Leave margins of only five spaces on each side. Double space before and after AUGUST FURNITURE SALE; also above and below the four tabulated lines. Use plain paper for this and all subsequent assignments for which forms are not specified. Hand in the three copies.

## PUNCTUATION AND PARAGRAPHING

Letter 12 is a form letter regarding dressers, which we are sending out at the present time in answer to inquiries.

**Assignment 4.** Write the letter with carbon to the firms named below. While this is a form letter, a carbon is necessary because a price is quoted. Before you begin, read through the letter carefully and decide on the punctuation and paragraphing.

Greenbaum & Ross, Inc., 1845 Fifth Ave., New York City. Their letter to us is dated three days ago.

Mr. C. W. Friend, 1432 Greenfield Ave., Akron, Ohio. Mr. Friend wrote us four days ago.

The Stone-Burkhart Furniture Co., Lincoln, Nebr. They wrote us five days ago.

Address envelopes for the letters. Submit them for signature and keep the carbons.

## INFORMATION ABOUT THE MAILS

Since one of your duties will probably be to prepare correspondence and other matter for mailing, you should know something about postal regulations. For domestic purposes mail matter is divided into four classes.

## FIRST CLASS

|  | <i>Rate</i>                           |
|--|---------------------------------------|
| Letters and all written and sealed matter.....           | 2¢ for each ounce or fraction thereof |
| Postal cards and post cards (private mailing cards)..... | 1¢                                    |

## SECOND CLASS

|                                 |                      |
|---------------------------------|----------------------|
| Newspapers and periodicals..... | 1¢ for each 4 ounces |
|---------------------------------|----------------------|

## THIRD CLASS

|   |                              |
|---|------------------------------|
| Miscellaneous printed matter weighing 4 pounds or less..... | 1¢ for each 2 ounces or less |
|---|------------------------------|

## FOURTH CLASS

Parcel Post—all matter not included above.

|  |                                       |
|--|---------------------------------------|
| (a) Parcels, except books, seeds, plants, etc., 4 ounces or less any distance..... | 1¢ for each ounce or fraction thereof |
|--|---------------------------------------|

## FURNITURE SECTION

- (b) Books, seeds, plants, etc., 8 ounces or less  
any distance..... 1¢ for each 2 ounces  
or less
- (c) Parcels of books, seeds, and plants over 8  
ounces, printed matter over 4 pounds,  
and all other parcels over 4 ounces..... Rates based on dis-  
tance and weight

## SPECIAL DELIVERY

The Post Office provides for the immediate delivery of mail by special messenger during certain hours. For such service a special stamp costing 10¢ (in addition to the regular postage) is sold. Ordinary postage stamps may be used in lieu of the special delivery stamp. In such cases the words "Special Delivery" should be written directly under the stamps.

## REGISTERED MAIL

For a fee of 10¢ in addition to the regular postage, mail matter may be registered. Special care is then given to its transmission. A receipt signed by the recipient will be returned upon request. Articles must be presented at a post office for registration and a receipt secured, and must not be placed in a street letter box. In case of loss, provision is made for indemnity.

## INSURANCE

*Parcel post packages* may be insured against loss at the following rates, which are in addition to the regular postage.

- (a) On parcels not to exceed valuation of \$ 5.00..... 3¢  
 (b) On parcels not to exceed valuation of \$ 25.00..... 5¢  
 (c) On parcels not to exceed valuation of \$ 50.00..... 10¢  
 (d) On parcels not to exceed valuation of \$100.00..... 25¢

**Assignment 5.** Calculate the total amount of postage on the following mail:

- (a) 25 letters each weighing 1 ounce or less  
 (b) 4 letters each weighing more than 1 ounce but less than 2 ounces  
 (c) 2 letters each weighing more than 2 ounces but less than 3 ounces  
 (d) A bundle of newspapers weighing 1 pound and 4 ounces  
 (e) A catalog weighing 1 pound and 2 ounces  
 (f) 3 books mailed separately, each weighing 8 ounces  
 (g) 2 letters to be mailed special delivery, one weighing  $\frac{1}{2}$  ounce and the other more than 1 ounce but less than 2 ounces  
 (h) 1 sealed package weighing  $3\frac{1}{2}$  ounces to be registered.

## POSTAL INFORMATION

The Post Office Department publishes for *free* distribution a pamphlet entitled "Postal Information." Every stenographer should secure a copy and keep it for reference purposes. It may be obtained at any post office. This pamphlet should be consulted for rates on foreign postage.

The Department also publishes annually the "Official Postal Guide" containing postal information of general interest, lists of post offices arranged alphabetically, by states, and by counties, etc. A copy may be obtained for 65¢ by addressing "Disbursing Clerk, Post Office Department, Washington, D. C." A "Parcel Post Guide and Zone Key" used in determining domestic parcel post rates is also obtainable.



ILLUSTRATION 3—SECTIONAL LOOSE LEAF CABINET FILE

## TRANSCRIBING

When taking dictation refrain from distracting the attention of the dictator by turning the leaves of your note-book or drumming on the desk with your pencil. Do not interrupt the dictation. Wait until a letter has been completely dictated before asking questions. Before beginning to transcribe, make sure of the spelling of all proper names. Be alive, alert, and enthusiastic about your work.

**Assignment 6.** Five letters from the regular correspondence of the Rishel Furniture Company will be dictated to you. Transcribe these letters as instructed in assignment 11, page 17. Write them all single space in the form of the style letter. Hand in the transcripts. When they have been signed, mail them and retain the carbon copies in your individual folder.

## FILING

The carbon copy of a reply to a letter is sometimes written on the back of the incoming letter, as explained on page 14. When a separate sheet is used for the carbon, it should be pinned or pasted to the incoming letter so that both sheets may be filed together. Always place the latest correspondence in front of any letters previously filed so that the older letters will be at the back.

An improvement on the box file is the loose-leaf cabinet shown in illustration 3. The cabinet consists of a number of drawers similar to the box file except that the papers are kept in place by a wire spring and thus prevented from slipping out of the file.

**Assignment 7.** File the letters you have written in a drawer of a loose leaf cabinet.

## SECRETARIAL PRACTICE

The quality which makes the secretary most valuable to his chief—and which incidentally paves the way to an executive position—is initiative. The successful secretary daily arrives at many important decisions; he sees things beyond the strict routine of his work; he is continually exercising his judgment as to whether or not a given matter should be brought to the attention of his chief or handled by himself. If it is a matter which he can handle himself, he takes the proper action without direction from any one.

The secretary will make himself thoroughly familiar with his employer's business, so that his decisions may rest on positive knowledge. He will take advantage of every opportunity that presents itself for adding to that knowledge. The catalogs, price lists, quotation sheets, etc., issued by his house will be carefully studied. Every line of business has its trade papers from which the secretary can glean much useful information as to prevailing conditions in the industry in which his employer is engaged. Initiative can be developed. Invite rather than shirk responsibility. The less supervision you require, the more valuable you are to your employer.

**Assignment 8.** The sales manager: "I wish you would make a note of these matters: Write the Furniture Record at Grand Rapids and ask them to let us know their terms for a page, half-page, and quarter-page advertisement on a yearly contract basis. Write E. R. Blake of the Blake Advertising Agency, Bourse Bldg., Philadelphia, that I will be glad to see him day after tomorrow (specify the date) at two o'clock. Wire the Pennsylvania Hotel, New York, for accommodations for next Monday."

**Assignment 9.** The sales manager: "Here is a letter (No. 1, page 23) from one of our salesmen, George Bingham, which has been referred to me by Mr. Rishel. Ask him to send in a fairly complete outline of what he has in mind. I

think the idea is good. You can get him at the Lake Hotel, Syracuse, N. Y. I'll sign the letter."

**Assignment 10.** Your employer is out of the city today. Important letters have come in from J. R. Donaldson & Co. (letter 7) and The Minch & Eisenbrey Co. (letter 10). Write them that their letters will be brought to the attention of Mr. \_\_\_\_\_ just as soon as he returns to the office, the day after tomorrow.

**Assignment 11.** You find that you are running short of stationery. Make out a requisition addressed to the Supply Clerk for 1000 letterheads and envelopes. Also order plain paper, carbon paper, pencils, pens, and other desk supplies. Add your signature to the requisition.

**Assignment 12.** The sales manager: "Here is a letter from Pickering & Co. of Pittsburgh (see letter 2). Write them and say that you are enclosing all the information and data they want. Tell them that the Royal is now one of our subsidiaries as we recently purchased a controlling interest in that company. Say that the best price we can make them is 20% and 5% for cash in thirty days. Suggest that we happen to know that exhibit samples are not so plentiful as they think. Tell them, too, that this furniture is not sample stock but consists entirely of staple lines. Ask them to write us within ten days as we cannot hold the offer open any longer than that."

**Assignment 13.** The sales manager: "Our letter to Minch & Eisenbrey (letter 10) has led them to close with us. Here is a telegram from them: 'Accept your proposition. Ship immediately 3 No. 240 bedroom suits finished in mahogany walnut old ivory. Minch coming to Williamsport next week to inspect line.' Write and thank them. Factory says we can ship the suits they want in three days."

**Assignment 14.** The sales manager: "Here is a memorandum from Blake (the credit manager) in which he says he cannot collect the account against Rand & Burton of Pottsville. As I know Mr. Rand personally he thinks a letter from me may help. Suppose you write them and I'll sign the letter. We don't want to lose this account, but neither can we carry them indefinitely. Remind them that the account has been running very nearly six months, call attention to our terms (see assignment 12), and tell them courteously but firmly that we must have our money."

**Assignment 15.** The sales manager: "Find out what the rates of postage are for those letters going to South America, England, France, China, and India."

# W. H. GRIFFIN COMPANY

MANUFACTURERS OF SHOES

MANCHESTER, N. H.



March 14,

1920.

Mr. E. T. Carver,

Clinton & Horne Co.,

Birmingham, Ala.

My dear Mr. Carver:

It occurs to us that you may be interested in what will probably be the last lot of floor shoes the W. H. Griffin Company will ever have for sale.

We enclose a list of the few boots which we have, which gives a general description of the stock, the sizes and widths, and the original prices. Practically all these goods were made this fall, and we believe you could use them to advantage at the reduced prices at which we offer them.

We have usually sold our floor goods on the basis of \$3.85 net for Welts; \$3.40 for McKay goods that originally sold at \$3.75; and \$2.60 for McKay and English Welt goods that originally sold above \$2.75. We shall make you a special price for the entire lot of \$2.75 for the Welts and \$2.50 for all McKay and English Welts, terms net 30 days.

Please write or wire me personally for sample pairs if you think the lot would interest you.

Yours very truly,

W. H. GRIFFIN COMPANY

By *W. B. Rowan*

FBR/MK

Enc.

## SHOE SECTION

### TECHNICAL TERMS

- Bal**—a front-laced shoe of medium height, as distinguished from shoes that are adjusted by buttons, buckles, etc. (Abbreviated from “Balmoral,” the original English name of the shoe.) An *English Bal* is a shoe of this description having an extra long receding toe and low heel.
- Blucher**—a style of shoe distinguished by the fact that the back portion of the “upper” is extended and loose at the inner edge, the flaps lacing across the tongue.
- box calf**—trade term for calf leather finished with the grain side stamped with irregular, crossed lines.
- butts**—a term applied to the heaviest grades of leather.
- Cabretta**—trade name for a leather made of the skins of sheep of the tropical climates.
- chrome**—a term indicating a special process of tanning sole leather. Other tannages are *hemlock*, *union*, and *oak*.
- Colonial**—a low shoe made principally for women’s wear, having a flaring tongue outside with a large ornamental buckle.
- culls**—leather of inferior or secondary grade.
- Dongola**—heavy goatskin tanned with a combination of vegetable and mineral acids and having a semi-bright finish.
- embargo**—an order issued by government authority prohibiting the shipping, importing, or exporting of merchandise.
- English Welt**—a term applied to a square-edged, close-trimmed turned sole; a shoe so made.
- findings**—a general term applied to articles which are incidental or accessory to the manufacture, the trimming, or the care of shoes.
- flesh-finished calf**—calfskin finished on the inner or “flesh” side as distinguished from that which is finished on the outer or grain side.
- foxing**—a piece of leather forming the lower part of the quarter of a shoe. The *quarter* is the back portion of the upper of a shoe, covering the heel and attached to the vamp.
- fudge edge**—an edge stitched and trimmed very close to the upper. A sole so attached is said to be “fudge stitched.”
- glazed kid**—the principal form in which tanned goatskin (kid) is finished for use as sole leather.
- gun metal**—proprietary name for a fine grade of well-finished calfskin leather with a dull or semi-bright surface.
- insole**—the inner sole of a “Welt” or “McKay” sewed shoe, to which the upper is stitched and the outsole is either stitched, nailed, or pegged.



- instep**—the part of a shoe corresponding to the front part of the arch of the foot.
- iron**—a measure indicating the thickness of soles. It is 1/48 of an inch.
- Juliet**—a negligee or house slipper for women, loose-fitting and with high front and back.
- Kangaroo**—a fine, tough, close-fibred leather made from imported kangaroo skins. "Kangaroo calf" is calfskin finished in imitation of genuine Kangaroo.
- kip**—a term applied to medium weights of cowhides—from 15 to 25 pounds.
- last**—the wooden or metal form or mold over which a shoe is constructed and which gives the shoe its shape.
- McKay**—a special process of making shoes, very generally employed in the manufacture of cheap and medium grades of shoes. Shoes made by this process are called "McKays."
- Nubuck**—a proprietary<sup>1</sup> name for a white or cream-colored buckskin leather.
- offal**—an inferior kind of sole leather made by compressing scraps; thus distinguished from "whole stock."
- ooze finish**—a trade term applied to velvet or suede finished calfskin.
- Oxford**—a low-cut shoe coming to the instep or ankle. An "Oxford Tie" is a laced Oxford.
- Oxlite**—trade name for a material made of vegetable fibre and used as a substitute for rubber and leather.
- packer hides**—hides of cattle taken off in the large slaughter houses of cities. They bring a slightly higher price than "country hides" (taken off by country butchers or farmers) because of the greater care and skill exercised in their removal.
- patent leather**—leather which has been finished with japan or varnish. When horsehide is thus finished, it is called "patent colt."
- rejects**—leather which, because of defects, cannot be used in making the highest grade shoes.
- shank**—a strip of metal used to stiffen the sole of a shoe between the heel and the ball; also applied to that part of the sole of the shoe.
- snuffed skins**—very thin shavings from the grain side of "side leather." *Side leather* is cowhide split to thickness adapting it for use for uppers of shoes or for other purposes.
- Soleoid**—trade name applied to a substitute for sole leather.
- split**—to shave leather into two or more thicknesses; the leather so treated.
- staple**—a general term applied to shoes embodying such features of style and make-up as render them subject to repeated demand from customers.
- stock tip**—a tip of the same material as the vamp. A "patent tip" is one made of patent leather.
- suede (swād)**—a method of finishing leather by buffing (which is a process of scouring or grinding) on an emery wheel the flesh side of leather so as to produce a sort of nap or velvety surface.

<sup>1</sup> That is, a trade name used by the manufacturer.

- age**—a general term applied to tanned leather.
- ile strength**—the resistance offered by any material, as leather, to a stress or pull in the direction of the length of the piece.
- ied shoe**—a shoe having the upper stitched directly to the sole wrong side out, the shoe being then “turned” right side out, the process giving it the name; called also “turns.”
- er**—a term applied collectively to the upper part of a shoe when stitched together and assembled.
- p**—the lower part of the “upper” of a shoe which is stitched or otherwise attached to the sole.
- trade name for a brand of glazed kid, made by a special tanning process. “Vici Mat” is thin, dull-finished calfskin used for shoe “uppers.”
- olize**—to render waterproof, as sole leather, by the use of oils or glycerine.
- a strip of leather in a shoe sewed around the edge of the “upper” and the inner sole, preparatory to the attachment of the sole. A “Welt shoe” is one so manufactured. “Welting” is the trade term for the stock used for the manufacture of Welts.
- eling**—a finish applied to the edge of the sole by means of a corrugated wheel. An edge so finished is said to be *wheeled*.
- g tip**—a tip having a point in the center and extending in curved lines backward at either side of the shoe. A *straight tip* is one stitched straight across in distinction from a wing tip.

## CORRESPONDENCE

1

Mon Shoe Company,  
423-429 N. Badger St.,  
Danbury, Conn.

Gentlemen:

Please make up and deliver to us in three weeks, if possible, one black Vici Mat kid top, | same exactly as your lining No. 8409, style 424, size 6½ A, | with AA ep and heel.

Also please make up and deliver us at the same time | one pair all vana brown kid button, size 7½, on the same last and style | of ep as your lining No. 3820, with exception that the heel is to be a 1/8" | 100 Cuban heel. In case

you have a last made especially for this pair, please forward it, | with the shoes.

Kindly let us know when we may expect delivery of this order.

Yours very truly. (138)

2

Dallas Shoe Co.,  
435 Roland St.,  
Fort Worth, Tex.

Gentlemen:

We wish to call your attention to the following stock shoes which we have ready for immediate delivery:

Black | Kid seamless foxed, plain toe, eight-inch boot. leather Louis heel, \$4.25.

Black Kid seamless foxed, | straight tip, eight-inch boot, leather Louis heel, \$4.35.

Lawrence's Seal Brown Calf tuxedo foxed, imitation | wing tip, leather Louis heel, eight-inch boot, \$5.25.

Blum's white washable kid top, seamless foxed, | black kid vamp, plain toe, eight-inch boot, leather Louis heel, \$5.25.

White Nubuck tuxedo foxed, | <sup>100</sup> imitation wing tip, eight-inch boot,

white ivory heel and welting, \$4.85.

Lawrence's Tan Side, seamless | foxed, straight tip, eight-inch boot, Cuban heel, \$4.75.

We have all the above shoes in | stock in A, B, C, and D widths, except the White Nubuck and the black and white shoes, which we | have in B, C, and D widths only.

If you are interested, we shall be pleased to submit samples for | your approval.

Yours very truly, (185)

## 3

B. F. Savage Shoe Co.,  
Stockton Place,  
Flint, Mich.

Gentlemen:

We take this opportunity to thank you for the courtesy extended to Mr. R. W. Nelson during his recent | call. The sample order which you gave him will be forwarded promptly

The following will confirm his verbal quotations:

|                                       | Red  | Black |
|---------------------------------------|------|-------|
| * # 446 Ladies' Oxlite Soles 9 Iron   | .23  | .21½  |
| # 506   Ladies' Oxlite Soles 10½ Iron | .26½ | .25   |

Oxlite Soles have | been demonstrated to be an excellent substitute for both rubber and leather. They are more flexible than leather. It is | <sup>100</sup> not necessary to reinforce the toe. These soles do not crack in stitching, and they are absolutely water-proof, slip-proof, | and stub-proof. The edges can be set the same as leather, and the shoe may be fudge-stitched | or wheeled, giving in appearance exactly the same results as you would get from a leather sole.

We believe that | you will be greatly interested when you receive the samples of these soles, and we trust you will place them | in your regular line.

Yours very truly, (187)

<sup>2</sup> Dictate thus: "Number 446 Ladies' Oxlite soles 9 iron, red 23¢, black 22½¢; number 506 Ladies Oxlite soles 10½ iron, 26½¢, 25¢."

4

Shoe Co.,  
38 Tenth St.,  
Hastings, Nebr.

emen:

We are pleased to send you two  
of stock # 415 as ordered. This  
of shoe | at the price of \$3.60  
exceptional bargain this season.  
are getting a genuine Kanga-  
vamp together with good heavy  
leather. We are confident this  
will give first-class service.  
think it | would be to your  
stage to order a larger quantity.  
We also call your attention to  
prices of our | other lines of  
in stock, which we believe to be  
favorable considering the pres-  
condition of the leather |<sup>100</sup> mar-  
A catalog<sup>s</sup> with complete price  
; enclosed.

We are taking the liberty of  
ng you a sample shoe | made of  
fion Calf," a stock just being  
d upon the market by Carl F.  
ins & Co. In examining | and  
ig the leather in this shoe, you  
be interested to note its unusu-  
firm finish and tensile strength |  
flesh-finished calf. We are told  
results from a new tanning proc-  
supplanting the rotting process  
nonly | employed in making suede  
es. This Chiffon stock is fin-  
l in brown, tan, cream, yellow,  
, and white.

Assuring you |<sup>200</sup> of our apprecia-  
of your patronage, we remain

Very truly yours, (211)

5

Mr. H. T. Lewis,  
643 Liberty Ave.,  
Frankfort, Ky.

Dear Sir:

I have no doubt that the price  
quoted you on sole leather seems high.  
If you have had | an opportunity to  
read the current number of the  
"Shoe Manufacturers' Record," you  
no doubt noticed an article on the |  
first page which explains the leather  
situation about as we understand it.  
We also know from our statistics of  
the | tanning situation that there is  
less leather on hand and more sold  
ahead than at any time for many  
years. | If we have made a mistake  
at all, it is in quoting too low a price,  
considering the value of |<sup>100</sup> leather as  
based upon the present market value  
of butts.

While there are many cheap tan-  
nages of sole leather, we | do not  
attempt to compete with them. In  
the first place, we know they are not  
adapted to the market. | Further-  
more, our belting business is the  
principal avenue for disposing of our  
leather, and the orders on hand today  
are | sufficient to take our entire  
production for at least six months.  
To fill orders for sole leather, we are  
compelled | to go into the market to  
buy other tannages; consequently,  
we must base our figures on what it  
will cost |<sup>200</sup> to replace our own stock  
if we dispose of it.

<sup>3</sup> While this word is also correctly spelled *catalogue*, in the interests of simplicity the form *catalog* is  
throughout this book.

I trust that this will make the situation clear to | you.

Yours truly, (223)

6

The Metropolitan Last Co.,  
456 Third Avenue,  
New York City.

Gentlemen:

We are replying to yours of the 15th.

Your assumption that we desire to have you apply the terms | and specifications of our old contract on our order of the 13th is correct. However, upon further consideration we have | concluded to direct you to make the bases without the leather lift on top. This change will slightly reduce the | cost of production. In billing this order we will therefore appreciate it if you will give us the benefit of | this reduction, as provided for in the contract.

Please refer to our order No. 3762, dated September |<sup>100</sup> 11, for #111 lasts. We<sup>4</sup> specified the AAA's and AA's to be made with | AA bottoms, the sole patterns to be stamped AAA and AA; we ordered the A's and | B's to be made with separate bottoms; and we ordered the C's and D's to be made with C bottoms, | the sole patterns to be stamped C and D. Notwithstanding these instructions, we have received one set of insole patterns | stamped AAA, AA, and A, and separate insole patterns for the B, C, and D widths. Please |<sup>200</sup>

<sup>4</sup> Dictate: "We specified the AAA's and double A's to be made with double A bottoms."

<sup>5</sup> Hurry along.

let us know by return mail how these lasts have been graded.

As we are urgently in need of the | stock, please investigate the matter immediately, make such corrections as are necessary, and expedite<sup>5</sup> the shipment of the remainder of | the order in every possible way.

Yours truly, (248)

7

The Hanover Heel & Innersole Co.,  
Hanover, Pa.

Gentlemen:

We have this day forwarded to you by express, charges prepaid, two lasts, size 4B, for right foot, | styles 112 and 113. It has occurred to us that you should be able to draft | one set of Oxford tie patterns that will answer for both of these lasts, as style 112 carries | a 12/8 heel and style 113 a 14/8 heel.

If you think this is practical, we | shall appreciate it if you will draft for us a model of a five-eyelet whole quarter Oxford, with square |<sup>100</sup> throat and folded vamps in the most up-to-date circular vamp pattern that you have. Please send this model | at the earliest possible date.

Are you in a position to furnish us with some 12/8 x 15/8 | one-section heels in sizes 6, 7, and 8, with tops to conform to the paper pattern enclosed, built with | 2/8 sole leather tops, split bottom lift, and balance of Soleoid? If so, please send us a sample and | quote the minimum

price at which you would accept an order for approximately 5000 of them.

We have found <sup>200</sup> that the operatives who cover our heels experience some difficulty in removing the top lifts from your plain wooden heels | because the tops of the screws have been buffed off to such an extent that the screw-driver cannot get | a good hold on the screw. Can you use screws with deeper slots?

Yours very truly, (256)

8

The Bland & Hudson Shoe Co.,  
Woonsocket, R. I.

Gentlemen:

We are returning to you today the following:

One pair patent colt gray cloth top, size 6½AA, | price \$3.25. The cloth on the back of each shoe is defective.

One | pair gun metal cloth top button, size 6½D, price \$2.75. The stock | in both is defective. We charged the customer \$1.50 for wear and ask that you give us | credit for the difference, \$1.25.

One pair fawn top patent colt button, size 5D, price |<sup>100</sup> \$3.50. The patent stock in the right shoe is very much duller than the stock in the | left one.

One pair gun metal cloth top button, size 6½A, price \$2.75. | The stock in the vamp of the left shoe and the toe boxes in both are defective. We charged | the customer \$1.50 for

wear. Please give us credit for the difference, \$1.25. |

One pair patent leather gray cloth top, size 5½A, price \$3.25. These | <sup>200</sup> shoes were returned to us owing to ill-fitting lining in the right one. Kindly give us credit for the | full amount.

One pair patent leather gray cloth top button, size 7D, price \$3.25. The | vamp of the right shoe is much heavier than that of the left. Kindly credit us accordingly.

According to our | figures we are entitled to a credit of \$15.15.

Yours very truly, (275)

9

Mr. C. G. Chilton,  
Manager, Bingham Shoe Store,  
Burlington, Iowa.<sup>6</sup>

Dear Sir:

Hides and skins are classified into three divisions: (1) calfskins less than 15 lbs. in the raw state, | (2) kip or veals 15 to 25 lbs., and (3) hides running over 25 lbs. All hides are | cut in two pieces down the back, making two "sides" (for convenience in tanning), and a great many of the | kips are so treated.

Calfskins, because of their high price, can only be used in strictly fine shoes. You cannot | expect to buy for much less than \$3.80 or \$4.00 a shoe made of any "P & V" |<sup>100</sup> calfskins which we are willing to identify with the certificate.

For shoes costing \$3.00 to \$3.75 | you can get leather made from kip or

<sup>6</sup> Never abbreviate Idaho, Iowa, and Ohio.

small sides—good durable stock with not quite the appearance of calf. Heavy side leather shoes will run from \$2.50 to \$3.25. |

Here is our suggestion:

Do not try to get too much for your money, but be sure you get all | you pay for. If you pay a calfskin price, get a good calfskin shoe; if you pay for kip or |<sup>200</sup> side leather, insist upon getting the best there is at that price. The "P & V" certificate guarantees what you | are getting and assures you that you are getting full value for your money.

We certify all our lines of | calf, kip, and sides, each plainly labeled. When you pay a calfskin price, get a calfskin certificate. When you buy | a cheaper shoe made out of kip or

side leather and see our certificate attached, you may be certain you | are getting the best leather of its kind. You may be sure that we will not send our certificates with |<sup>300</sup> any leather that we are not certain is going to give the wearer satisfaction.

Tell your manufacturer to use certificates; | we provide them free upon request to any manufacturer cutting the leather, one certificate for each pair of shoes. If | the manufacturer refuses to give you the certificate, he is probably not giving you "P & V" leather.

If your | manufacturer won't accommodate you, write us and we shall give you a list of those who will.

Yours very truly, | (380)

10

Mr. T. R. Owens,  
Manager, Newton Shoe Co.,  
Kenosha, Wis.

Dear Sir:

In an endeavor to meet as far as practicable the wishes of our trade when it was necessary | to adjust our prices at the time the great advance in the cost of raw material entering into our product | first went into effect, we interviewed the large majority of our customers, through our salesmen, to determine the best course | to pursue. It was the opinion of the great majority of the merchants consulted that the prices on certain numbers | should not be advanced if it was possible to make the shoes of materials that would approximately maintain the old |<sup>100</sup> prices.

This applied particularly to numbers 106, 107, and 153. Many dealers expressed the | opinion that these numbers could not be retailed above \$4.50. In order to maintain the old price, | it was suggested that we cut uppers for these numbers from Cabretta. This we did, substituting numbers 108, | 109, and 154 to meet the situation.

The Cabretta uppers have not proved to be uniformly | satisfactory to the trade or to us; therefore, we have decided to discontinue the \$3.00 grades. In endeavoring to |<sup>200</sup> develop a satisfactory skin to meet the abnormal demand for

er, the manufacturers of glazed sheepskins have done everything in | their  
 to find a substitute for Vici. Their failure to do so is due to no fault on  
 | part, but to the fact that the nature of the skin is such that it is not  
 dable for the | purpose. Such being the case, we advise our trade to pay  
 rice for Vici Kid. The majority of our | customers have accepted this  
 as being the proper solution to the problem, so we have decided to make  
<sup>100</sup> following numbers with Vici uppers:

|                                    |    |        |
|------------------------------------|----|--------|
| Stock No. 108 Patent Tip Juliet    | at | \$3.45 |
| Stock   No. 109 Plain Toe Juliet   | at | 3.45   |
| Stock No. 154 Stock Tip   Oxford   | at | 3.50   |
| Stock No. 155 Plain Toe Oxford     | at | 3.50   |
| Stock   No. 359 Three-Strap Sandal | at | 3.65   |

Numbers 106, 107, | and 153 have been withdrawn from the market. We  
 continue the \$3.20 line made | <sup>400</sup> from Cabretta in the stock tip Juliet, plain  
 illet, and stock tip Oxford. Every effort will be made to | make this line  
 actory, but we recommend the Vici goods.

Yours very truly, (433)

### 11

Jorwood Shoe Co.,  
 Springfield, Mass.  
 emen:

have the following report to  
 on the Boston leather market  
 tions:

hoe manufacturers generally are  
 covered | for the present and  
 it of the market until something  
 te is known concerning the fall  
 winter trade. | Local tanners  
 ealers in sole leather, both  
 stock and offal, report a quiet  
 ess. In some instances prices |  
 dropped off somewhat, owing  
 e small amount of buying.

ight-weight double shoulder oak  
 ig is much in | demand, quot-  
 : 7 to 7½¢. Heavy-weight stock  
 coming firmer, 8½¢ | <sup>100</sup> being

considered the average market for  
 business.

Tanners report better buying of  
 dry hide hemlock, union, chrome, and  
 oak | sole leather. Prime steer  
 backs are bringing 71 to 73¢; light  
 cow backs 69 to 70¢. | Scoured  
 packer hide bends and scoured oak  
 backs are selling firmly at 75 to 77¢  
 for | No. 1's and 2's.<sup>7</sup> Slaughter hem-  
 lock and buffalo sole are very quiet.  
 No. 1 packer hide of the former is |  
 quoted today at 52¢; No. 1 of the  
 latter at 36¢; country hides at 1 to | <sup>200</sup>  
 2¢ less.

There has been no change in  
 quotations on oak, hemlock, and  
 union offal. There is a fair | sup-  
 ply of side upper leather splits, patent  
 leathers, and sheep leathers available  
 without change in price. Wax splits

<sup>7</sup>The plurals of figures and letters are formed by 's.



are quiet | and there is a moderate demand for fine chrome split.

In side leather the demand is improving, centering around the | best grades of full grain chrome tanned in colors and blacks. Supplies of top and medium grades of such leather | are scarce and firm in price, bringing from 44 to 46¢ according to grade, weight, and tannage. |<sup>300</sup> Good damaged rejects are selling at 36¢.

Calf leather is in demand, especially for men's weights. Colors have | the call and prices continue strong. Ooze finish sells as fast as tanned. Snuffed skins are in fair request, but | the supply is small. Glazed kid dealers report the market cleaned up in medium and high-grade skins. There | is nothing but culls offered.

After I explained our requirements, the best-informed dealers advised me to buy now. Just | at the moment it is a buyer's market. When the embargoes on export shipments and the British embargo<sup>8</sup> on imports |<sup>400</sup> are lifted, dealers will release heavy shipments to foreign markets where leather is very much in demand. This of course | will stimulate prices in the home market.

My judgment is that we should cover<sup>9</sup> on sufficient stock to keep our | factory running for at least two months. I await your instructions as to whether I shall proceed to place the | orders which we drew up before I left the factory.

Yours very truly, (473)

information from the most reliable sources indicates that shoes will be still higher than at present and reports from all sections of the country point clearly to an increase in the volume of business which will tend to further increase prices on account of our enormous purchasing power we have been able to stock a large quantity of staple leather and we are therefore in a position to guarantee prompt delivery of shoes for the spring trade at present prices our advice therefore is to place as liberal orders as you find consistent with your requirements our salesmen are leaving this week for their territories with the very latest information as to styles and general conditions in the trade the question of style in womens shoes is the paramount issue our entire organization is now devoted to the manufacture and distribution of womens fine shoes women are demanding the daintiest most perfect fitting footwear that it is possible to produce we have devoted much time to securing advance information and in working up our new lasts and patterns because of the necessity of catering to this demand you will be surprised at the beauty originality and completeness of the spring line which our salesman will show you you can supply yourself fully with welts turns and mckays from our line and be sure of showing the snappiest styles obtainable we have reached the ten million mark in vol-

<sup>8</sup> Note carefully the spelling of the plural of this word.

<sup>9</sup> That is, buy or secure options on the stock.

ume of sales we were somewhat late in deliveries toward the latter part of last season because of the overwhelming business given us the scarcity of labor the procuring of special materials and adverse weather conditions which prevented the drying of leather as quickly as heretofore these difficulties however have been surmounted and we are now prepared to make deliveries on time the new lasts and patterns are so varied that we shall not attempt to enumerate them in this letter inasmuch as mr . . . will call upon you in about

ten days with a full line of samples we wish however to call your particular attention to our line of white shoes to the new ideas in sport shoes and to the new shoe soap calf you know the value of the shoe soap kid the shoe soap calf is on a par with it one year ago we asked you to bear in mind that it would be well to place liberal orders as the country was then facing a real shortage in leather the facts have borne out this statement and we believe our advice to order liberally at this time is equally sound yours sincerely

### OFFICE TRAINING ASSIGNMENTS

In this section you are working for the W. H. Griffin Company, Manchester, N. H., shoe manufacturers, of which your teacher is the secretary.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

Write all letters double space in the form of the style letter shown on page 38. Note the indentation of the second and third lines of the address and the arrangement of the date and signature.

The first impression of a letter is always made by its general appearance. If there are misstruck letters, skipped spaces, or careless erasures, your letter creates as bad an impression as does a salesman who is careless and slovenly in his dress or appearance. The letter you write is the firm's representative.

**Assignment 1.** Copy the style letter with carbon on one of our letter-heads (form 3). Use the current date.

**Assignment 2.** Copy letters 3 and 4 with carbons, using the other letter-heads in the budget.

Submit the three letters for signature. In this and all succeeding assignments requiring carbons, always place the carbon copies in your individual folder after they have been approved.

## MECHANISM OF THE TYPEWRITER

A workman can do his best work **only** when the tools he uses are kept in good condition. Clean the type of your machine at least once a day with the stiff brush usually provided for that purpose.

You should be acquainted at least in a general way with the mechanical features of your machine. A book of instructions can be secured from any office of the typewriter company whose machine you use. Obtain a copy and study the information about operating its various mechanical features.

**Assignment 3.** Point out the following parts of your machine. What are these parts used for?

- (a) The shift lock
- (b) The back space key
- (c) The marginal stops
- (d) The variable line space mechanism
- (e) The paper release key
- (f) The tabular stops
- (g) The bichrome device (if your machine is so equipped)

*Can you take off the ribbon of your machine and put on a new one quickly?*

## PUNCTUATION AND PARAGRAPHING

Letter 12 is a form letter which we send out to our customers to inform them that one of our salesmen will call soon.

**Assignment 4.** Study the letter carefully and decide on the punctuation and paragraphing; then write this letter single space without carbon to the firms named below. Use plain paper. Submit for approval.

Mr. T. B. Owens, Manager, Newton Shoe Company, Kenosha, Wis. Our salesman for this district is Mr. Clarkson.

Sheldon Shoe Store, Burlington, Iowa. Mr. Clarkson also visits this city.

Hastings Shoe Company, Indianapolis, Ind. Mr. Walters calls on our Indiana trade.

## STOCK LIST

Below is given a part of a stock list showing some of the lines of shoes we carry this season. Column 1 shows the stock number, column 2 a description of the shoe which we carry under that stock number, while columns 3 and 4 show the sizes and widths that we carry in stock.

| <u>Number</u> | <u>Description</u>   | <u>Sizes</u>             | <u>Widths</u>      |
|---------------|--|--------------------------|--------------------|
| 2076          | Patent—Paris Button—Camille Last—<br>Black Cloth Top—Plain Toe—Light<br>Single Sole—Welt—Close Edge—16/8<br>Leather Louis Heel | 3½ - 7<br>3 - 7<br>2 - 7 | AA<br>A<br>B, C, D |

|       |   |        |         |
|-------|---|--------|---------|
| 2802  | Russia Norwegian—Storm Blucher—         | 3½ - 7 | AA      |
|       | Romp Last—Heavy Double Sole—Welt—       | 3 - 7  | A       |
|       | 3/16 Scotch Edge—10/8 Heel              | 2½ - 7 | B, C, D |
| 2760A | Champagne Kid—Angeles Bal—Frisco        | 4 - 7  | AA, A   |
|       | Last—Putty Cloth Top—Light Single       | 3 - 7  | B, C    |
|       | Sole—Welt—Close Edge—15/8 Cadet<br>Heel |        |         |
| 2136  | Patent—Plaza Pump—Kippy Last—           | 4 - 7  | AA, A   |
|       | Plain Toe—Light Single Sole—Welt—       | 3 - 7  | B, C, D |
|       | Concealed Edge—15/8 No. 26 Heel         |        |         |
| 2034  | Patent—Button—Snap Last—Mat Top—        | 3½ - 7 | AA      |
|       | Single Sole—Welt—3/16 Scotch Edge—      | 3 - 7  | A       |
|       | 14/8 Heel                               | 2½ - 8 | B, C, D |
| 2396  | Platinum Calf—Bal—Milady Last—Black     | 4 - 7  | AA, A   |
|       | Cloth Top—Single Sole—Welt—Close        | 3 - 7  | C, D, E |
|       | Edge—16/8 No. 26 Heel                   |        |         |
| 2218  | Mat Kid—Manhattan Tie—Trix Last—        | 4 - 7  | AA, A   |
|       | Plain Toe—Light Single Sole—Welt—       | 3 - 7  | B, C, D |
|       | Concealed Edge—14/8 Heel                |        |         |
| 2711  | White Swiss Buck—Colonial Tie—Min-      | 4 - 7  | AA, A   |
|       | uet Last—Plain Toe—Light Single Sole—   | 3 - 7  | B, C, D |
|       | Welt—Close Edge—15/8 No. 26 Heel        |        |         |
| 2319A | Royal Kid—Button—Gloria Last Mat        | 3½ - 7 | AA      |
|       | Top—Single Sole—Welt—Square Edge—       | 3 - 7  | A       |
|       | 15/8 Heel                               | 2½ - 7 | B, C, D |
| 2399  | Platinum Calf—Bal—Tramp Last—Mat        | 3½ - 7 | AA      |
|       | Top—Duflex Rubber Sole—Welt—3/17        | 3 - 7  | A       |
|       | Scotch Edge—7/8 Rubber Heel             | 2½ - 7 | B, C, D |

**Assignment 5.** Make a copy of this list with two carbons. Study the arrangement of the list carefully and decide where the tabular stops should be placed. Experiment with the first item before you start copying the list with carbons. Hand in the three copies.

#### ALPHABETIZING

You will probably be called on from time to time to arrange various lists of names in alphabetical order. Some care and practice will be required to do this skilfully and without loss of time. Go through the list and pick out all the names beginning with A; then all those beginning with B, and so on. Be sure to arrange all the names beginning with a given letter in strict alphabetical order.

**Assignment 6.** Following the directions given, make an alphabetically arranged typewritten list of the names of a few of our customers given below. In making the list write the names of individuals thus: Flocken, W. R.

|                            |                      |
|----------------------------|----------------------|
| Chas. W. Oppenheim         | Blumberg & Rosenbaum |
| W. R. Flocken              | E. R. Weisman        |
| Henry C. Abbott            | Penniman Bros.       |
| R. A. Goode                | Hochschild & Barron  |
| Keith Shoe Store           | John C. Ditmer       |
| W. P. Whyte                | Greeley & Co.        |
| Barclay Shoe Company       | T. W. Scherer        |
| R. T. McLaughlin           | Louis C. Fishel      |
| T. B. C. Yearley           | Wolcott & Tate       |
| Style-Plus Shoe Store      | C. E. Nickerson      |
| Julius Walderman           | Fitzpatrick Shoe Co. |
| Frederick W. Sinclair      | D. F. Voight         |
| Alexander Gordon & Company | Walton Shoe Co.      |

#### TRANSCRIBING

Before beginning to transcribe, always make sure that your type is perfectly clean. The appearance of even a well arranged letter will be utterly spoiled if the type is dirty and clogged.

At the head of the page in your note-book on which you start taking dictation, write the current date so that a letter may be readily found if you should have occasion to refer to it. When you have transcribed a letter draw a line through the notes.

**Assignment 7.** The secretary will dictate to you five letters from our regular correspondence. Transcribe them in the form of the style letter. Watch for a mention of an enclosure.

Hand in the transcripts. If they are correct, the secretary will sign both originals and carbons in the usual manner. Mail the originals and retain the carbons.

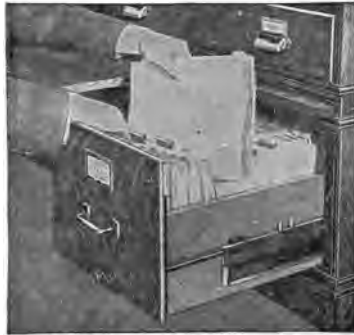


ILLUSTRATION 4—VERTICAL FILING DRAWER

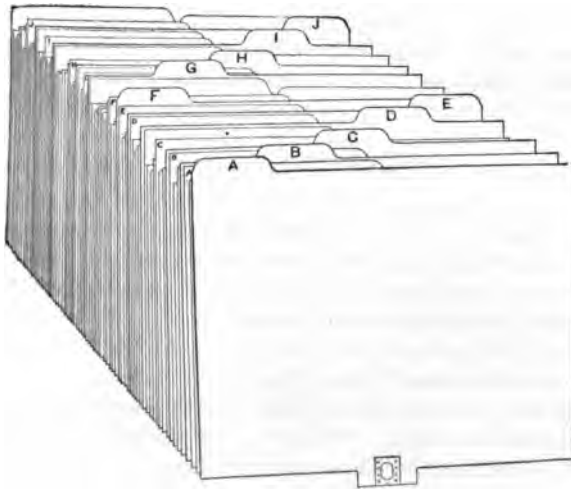


ILLUSTRATION 5—SIMPLE ALPHABETICAL SYSTEM FILE

#### FILING

Since papers placed in the box file or loose leaf cabinet lie perfectly flat, filing by this method is called *flat filing*. Flat filing has certain obvious disadvantages. No provision is made for keeping the correspondence of one indi-

vidual separate from that of another individual whose name begins with the same letter. Correspondence with different individuals or firms varies in volume; hence the compartments of the file fill up unevenly. This method is therefore seldom used in modern business offices for the filing of letters. It is sometimes used to advantage in filing orders, quotations, and similar papers.

The modern system of filing is the vertical. Vertical filing means filing papers on edge in a drawer like that shown in illustration 4.

The drawer is equipped with a set of index guides made of stiff material of proper size to stand in the drawer. The guide has a tab at the top on which, in the case of alphabetical filing, a letter of the alphabet is printed. (See illustration 5.)

Correspondence is placed in folders, which are filed back of the appropriate guide. Each folder has a projecting tab on the rear edge on which is written the name of the individual whose letters are filed within. The last folder in each division of the index is usually a general or miscellaneous folder in which are filed letters to and from correspondents for whom no separate folder is provided because the correspondence in each case consists of a few letters only. Should the correspondence with such a firm be continued, however, a separate folder is provided for it.

**Assignment 8.** Prepare folders for all the firms to whom we have written. Write such names as B. F. Savage Shoe Company, thus: Savage, B. F., Shoe Company. File the carbon copies of the letters you have written.

#### SECRETARIAL PRACTICE

"Write it down," "Make a note of it," are the successful secretary's mottoes. Even a good memory is far from infallible. The ability to take notes in concise, compact form, or to make an abstract of an article or report can be cultivated by practice. Rambling memorandums which fail to state clearly the important points are a source of annoyance to the employer.

To aid his memory the secretary keeps a "tickler" or "jogger." The tickler may consist of a dozen sets of vertical guides (one set for each month). Each set consists of thirty-one numbered guides—one for each day of the month—and an equal number of folders. In these folders the secretary places any papers regarding matters which are to come up for attention on a certain date. The first thing in the secretary's daily routine is to examine the papers in the tickler for that day and take the appropriate action on the matters to which they refer. Should it be thought undesirable to keep correspondence out of the regular files, a tickler in the form of a card index may be kept. Cards containing notes on matters which require further attention are filed at the proper place in the card index. The secretary does not neglect any opportunity to systematize his work so that he can be of the largest possible usefulness to his employer.

**Assignment 9.** The secretary: "About this telegram from Clinton & Horne (see letter, page 38). Send them the samples. Find out how many pairs we have on hand. We will pay the freight if they take the entire lot. Let me see your letter before it goes." The telegram is as follows: "Your letter fourteenth. Send samples immediately." On investigation you find that we have on hand 109 pairs of Welts, 88 pairs of McKays, and 77 pairs of English welts.

**Assignment 10.** We carry a quarter-page advertisement in the "Shoe Manufacturers' Record" published at 410 Second St., Boston. Your chief is out of town and has left instructions for you to prepare the copy for an advertisement on Oxlite Soles to be illustrated by two small cuts. Prepare the advertisement on the basis of the information given in letter 3.

**Assignment 11.** The secretary: "I have had King (the shop foreman) look at the shoes Bland & Hudson (letter 8) returned. We will credit their account for the full amount. Tell them that patent leather in particular has lately been running very irregularly. In spite of the utmost precautions, imperfect stock will sometimes be made up. Express our appreciation of their past business and assure them that we are always prepared to replace any imperfect goods which may inadvertently be shipped to them.

**Assignment 12.** The secretary: "Here's a letter from the Long Shoe Co. (No. 4) asking us to quote prices and terms on the Chiffon Calf shoe. Wire them a price of \$4.15. You know our terms of course." (4% for cash in 10 days, 2% 30 days, net 60 days.)

**Assignment 13.** The secretary: "The Dallas Shoe Co. (letter 2) comes back at us this morning with an offer of \$4.60 a pair straight for a dozen trial pairs of each of the shoes we quoted them. We'll take them up if we can get our prices as originally quoted with a discount of 5% for cash. Figure it out and let me know how near their offer comes to our price."

**Assignment 14.** The secretary: "Here is a letter from Owens of the Newton Shoe Co. (letter 10). He says that he has been selling a fair number of No. 108 Cabretta uppers and is willing to pay a reasonable increase in price if we can continue to furnish them. Tell him we'll accept special orders provided the minimum quantity ordered at one time is 20 pairs. Our quotations will have to be on the basis of the market price of Cabretta at the time the orders are placed; furthermore we will have to have two months in which to make delivery. Write him a nice letter."

**Assignment 15.** The company is about to purchase a new typewriter for your use. Write a little memorandum stating what make of machine you would like to have, and why you prefer that machine.





The Grand Painter

# John Lucas & Co. Inc.

## PAINT AND VARNISH MAKERS

SINCE 1849

**PHILADELPHIA**  
Specialty Paints and Varnishes

322 NACE STREET February 14, 1920.

OFFICES  
 PHILADELPHIA  
 NEW YORK  
 CHICAGO  
 BOSTON  
 PITTSBURGH  
 OAKLAND, CAL.  
 FACTORIES  
 CINCINNATI, O.  
 CHICAGO, ILL.  
 CABLE ADDRESS LU/PAIN

Harrison Construction Co.,  
 Great Western Bldg.,  
 Chicago, Ill.

### Attention Purchasing Agent

Gentlemen:

We have your letter of February 10 informing us that you are in the market for concrete paints.

For a number of years we have been experimenting and making practical tests to determine the best method of treating cement and concrete floors, and exterior cement, concrete, and stucco surfaces. In all tests made with competitive goods as well as with materials made from special formulae of our own, we have invariably found LUCAS CEMENT AND CONCRETE FILLER the most perfect material for treating such surfaces.

We note that your problem is concerned with the repainting of surfaces that are beginning to show the effects of wear. It is not necessary to apply the filler again on such surfaces. One coat of paint applied so that it can be brushed out well will give the best results. For exterior surfaces two thin coats should be used. In preparing the surface for repainting, no strong alkali should be used for cleaning.

We quote the following prices:

|                                     | 5-gal. cans | barrels |
|-------------------------------------|-------------|---------|
| Flat and Gloss for Exterior - White | \$1.70      | \$1.65  |
| All other shades                    | 1.65        | 1.60    |
| Lucas Cement Floor Paint            | 1.65        | 1.60    |
| Lucas Cement Filler                 | 1.60        | 1.55    |

In addition to white our cement paints are made in the following colors: Colonial Yellow, Ivory, Silver Gray, Steel Gray, Green Stone, Acorn Brown, Venetian Red, Storm Gray, Napoleon Green, and Green Slate.

We hope to receive your order and shall be very glad to give you any further information you may desire.

Very truly yours,

JOHN LUCAS & CO., INC.

*E. Waller White*

General Sales Department

## PAINTS AND GLASS SECTION

### TECHNICAL TERMS

- adhesive**—sticky; clinging to a surface.
- alkali**—various substances having the power of neutralizing acids and forming salts with them, or of combining with fats to form soaps.
- asphaltum**—a bituminous substance derived from petroleum and other substances, used for pavements, sidewalks, roofing, etc.
- benzine**—a liquid made of petroleum, used as a solvent.
- blistering**—the raising of paint from a surface caused by the presence of confined bubbles of air or gas.
- blooming**—a clouded or smoked appearance on the surface of paint and varnish.
- capillarity**—the power possessed by porous bodies of absorbing a fluid.
- chalking**—a whitish or chalky appearance of paint resulting from exposure to the elements.
- consistency**—the state or degree of density or fluidity.
- creosote**—an oily liquid obtained from wood-tar and used on wood to prevent rotting.
- crude**—being in a raw or unprepared state; not refined.
- disintegration**—wearing away; separation of the particles which compose a substance by the action of the elements.
- elasticity**—a property of paint prepared by a special process in such a way that it contracts or expands under the influence of atmospheric conditions.
- filler**—a material applied to the bare wood for the purpose of filling the grain, thus making a smooth surface for the coat of paint or varnish.
- film**—a coat of paint or varnish.
- flaking**—the peeling or scaling of a coat of paint or varnish.
- formula**—a statement giving the ingredients and methods of compounding any preparation such as paint or varnish.
- hermetically**—made perfectly air-tight by means of some chemical fluid (applied to containers for paint).
- impermeable**—a term applied to a paint coating so prepared that it will not allow moisture, air, or gas to pass through.
- insoluble**—incapable of being dissolved.
- japan**—a quick-drying liquid similar to varnish. A small portion added to ordinary house paints makes them dry more quickly: hence it is sometimes called *japan drier*.
- lampblack**—a fine black pigment made from soot.
- limpid**—characterized by clearness or transparency; translucent.
- linseed oil**—a drying oil produced from linseed (flaxseed).
- lustrous**—having a bright, brilliant surface.

- naphtha**—a volatile colorless liquid obtained from petroleum and used in making paint or cleaning textiles, and for heating and lighting purposes.
- neutralize**—to render inactive the acid or alkaline properties of paint.
- oxide**—a compound of oxygen and a chemical base.
- panel**—a thin board painted to show the appearance of paint when applied.
- paraffin oil**—a product given off in the distillation of bituminous shale and used for illuminating and lubricating purposes.
- pigment**—any substance used by painters to impart color to paints.
- porous**—having pores; dotted or pitted as if full of little holes.
- primer (primer)**—the first color or coat applied.
- pumice**—light porous lava used for smoothing and polishing.
- saponify**—to convert into soap by combination with an alkali.
- semi-flat**—only partially glossed. A paint is said to be “flat” when it has a “dead finish,” i.e., no gloss.
- shellac**—a material used in making varnish.
- solvent**—any fluid or substance that dissolves or renders other bodies liquid.
- specific gravity**—a term used to express the ratio of the weight of a given bulk of any substance to that of a standard substance. The specific gravity of paints is measured with respect to the weight of water.
- stucco**—plaster or cement used as a coating for walls, either internally or externally, and for the protection of ornamental effects and figures.
- thinner**—any substance used in thinning down a paste paint.
- toner**—any substance used to heighten the color of paint.
- translucent**—transparent; clear.
- turpentine**—a fluid obtained from certain trees such as pine, and used to mix paints.
- vermillion**—a beautiful, brilliant red color, toning toward orange.
- viscosity**—the state or quality of flowing slowly.
- volatile**—evaporating rapidly.
- wainscoting**—a wooden lining or boarding of the walls of a room, usually in panels.
- waterproof**—so prepared as not to allow water to pass through.

## CORRESPONDENCE

1

Steele Canning Co.,  
Charlotte, N. C.

Gentlemen:

Our representative, Mr. L. F. Tipton, informs us<sup>1</sup> that on March 21 he had a conversation with you | in which you expressed interest in our Lucaseal Enamel. We thank you very much for the courtesies extended to Mr. | Tipton.

This enamel is an American-made white enamel superior to any imported white enamel. It is made up primarily | for exterior use, but has been found equally satisfactory for interior work. On outside exposure the enamel retains its gloss | and intense whiteness for a long time. It is exceptionally easy to work and allows the practical painter more than |<sup>100</sup> sufficient time to spread it on the largest surfaces without difficulty. It sets within four hours and dries in twenty-four | hours.

We have sold Lucaseal Enamel very widely for high-grade exterior and interior work of every description, and | find that it works equally well on wood, metal, plaster, brick, cement, or composition surfaces. It is put up in | specially designed hermetically sealed slip-top cans.

Enclosed you will find a price list giving quotations on Lucaseal Enamel.

Very | truly yours, (182)

2

Murray Top Co.,  
Muskegon, Mich.

Gentlemen:

We are very much interested in the difficulty you have encountered in securing perfectly satisfactory coach and auto finishes. | Our finishes represent the result of ten years of experimentation in this special field, are very widely used by carriage | builders and automobile manufacturers, and have given satisfactory results.

We note that you are particularly interested in experimenting with Lake | colors. The translucent qualities and excellent results that are obtained by their use amply compensate for their comparatively high cost. |

The grounds<sup>2</sup> for Lakes are usually prepared with Coach English Venetian Red, Vermilion, and White Lead for the lighter shades, |<sup>100</sup> and Coach English Tuscan Red, Red Lead, and Orange Mineral for the deeper shades. Chrome Yellow can often be used | to advantage for grounds for either the light or deep-colored Lakes. We recommend the use of Coach Lucasine Vermilions | for their brightness and covering qualities. They never darken like English Vermilions.

<sup>3</sup>You will be interested in the detailed description | of Lake colors

<sup>1</sup> The writer avoids the hackneyed expression, "advises us."

<sup>2</sup> The material which forms the base of the paint.

<sup>3</sup> Note how the writer stresses the "you" element in this letter.

given in the booklet we have sent you under another cover. We trust that we shall have | the pleasure of hearing from you again.

Yours truly, (189)

3

Slater Paint Co., Inc.,<sup>4</sup>

Chester, Pa.

Gentlemen:

This replies to your letter of the 4th instant.

It is not practicable to make paint coatings for either | wood or metal surfaces entirely impermeable for all time. In the case of house paints a reasonable amount of permeability, | which leads to chalking, is desirable for successful repainting. Therefore paints for this purpose, if made reasonably impermeable, will hold | their color and gloss and at the end of a few years may be successfully repainted.

The dried film produced | by Sipe's Japan Oil AA Extra is reasonably impermeable. It resists the entrance of moisture, air, and gases, and | <sup>100</sup> holds its gloss much longer than the linseed oil film. White Lead and other pigments thinned with a mixture of | one-half AA Extra and one-half raw linseed oil are much less permeable than paints made with linseed | oil and driers<sup>5</sup> alone; hence paints mixed with reinforced and waterproofed linseed oil wear longer, hold their color longer, chalk | and wash less, and are better from every point of view.

We believe that you will be well pleased with | the quality of work produced by our Japan Oil. An order blank is enclosed. For an initial order we will | <sup>200</sup> allow an additional discount of 5%.<sup>6</sup> If there is any further information we can give you, please call | upon us.

Yours truly, (224)

4

Glenn & Hargood, Ltd.,<sup>7</sup>

830 Lynch Street,

Zanesville, Ohio.

Gentlemen:

We have your inquiry of August 28 addressed to the American Window Glass Company. Since the American | Company does not handle window glass in less than carload lots, the inquiry has been referred to us.

<sup>4</sup> Abbreviation for *incorporated*.

<sup>5</sup> Spelled also *dryer*.

<sup>6</sup> That is, in addition to the regular trade discounts.

<sup>7</sup> The abbreviation *Ltd.* after a firm name indicates that the firm is a limited partnership in which the partners are liable only for a limited amount of the partnership debts. In ordinary partnerships each partner is liable for the full amount of the partnership debts. Business men are careful to ascertain the form of business organization of the customers to whom they extend credit.

We are | pleased to quote on various sizes in single and double strength, A and B quality, as follows:

| Size    | Single Strength |                       | Double   Strength |        |
|---------|-----------------|-----------------------|-------------------|--------|
|         | A               | B                     | A                 | B      |
| 8 x 10  | \$3.30          | \$2.56                | \$4.46            | \$3.85 |
| 10 x 12 | 3.36            | 2.60   <sup>100</sup> | 4.52              | 3.92   |
| 10 x 14 | 3.42            | 2.66                  | 4.58              | 3.98   |
| 16 x 20 | 3.89            | 3.05                  | 5.60              | 4.70   |

We are not in a position | to quote on C quality, as we do not handle this grade of glass. We assume from your inquiry that | you wish the glass for greenhouse purposes. If such is the case, we do not believe C quality would be | <sup>200</sup> at all satisfactory for your use.

We estimate the freight rate on a box of S.S.<sup>8</sup> glass from Warren, | Ohio, to Zanesville, Ohio, at 5¢; on a box of D.S.,<sup>9</sup> 8¢. We trust we shall have | the pleasure of receiving your order.

Yours very truly, (249)

5

Mr. R. T. Hartman,  
Manager, Ackermann Paint Co.,  
Ogden, Utah.

Dear Sir:

We are forwarding to you today by parcel post two panels that we have made up in accordance | with the specifications in your letter of October 24. The wooden panel can be cut up into pieces for | exposure under different conditions. The sheet iron panel can be kept for reference.

We regret very much that we are | unable to send you samples of perfect workmanship. More or less dust settles on the varnish before it sets and | makes the surface look as if it had pitted. The specks shown on the panel, however, are simply mechanical dirt. | <sup>100</sup>

Rather an interesting point in this connection is that Mr. Carroll, who made these panels, tells us that it is | practically impossible to finish a perfect panel in his department, because of the fact that there is a great deal | of vibration from the heavy machinery, which keeps the dust particles in constant circulation. We do not have a dust-proof | room at the factory where a job of this nature can be done. It would be well to explain | this matter to the railroad people.

The panels were finished as follows:

First and Second Coat—Certified White Lead reduced | <sup>200</sup> to brushing consistency with oil and japan, the proportion being 1 lb. lead in oil and 6/128's | of oil and japan

<sup>8</sup> Abbreviation for *single strength*.

<sup>9</sup> *Double strength*.

mixture, which is 16 parts of oil to one part of japan.

Third Coat—P.R.R.<sup>10</sup> | Tuscan Red in oil and japan.

Fourth Coat—Railway Exterior Rubbing Varnish.

Fifth and Sixth Coats—Railway Exterior | Finishing Varnish.

The fourth coat was rubbed down with pumice and water, and the fifth coat was mossed down.

Yours | very truly, (282)

6

Reese Supply Co.,  
Monroe Square,  
Homestead, Pa.

Gentlemen:

We are very glad indeed to receive your inquiry of March 27 with reference to our Viscolite finishes. | We feel certain that you will be able to handle this line to good advantage.

These finishes represent the latest | development in high-grade varnish production. They combine every essential quality for easy and correct application at moderate cost. All | possess light color, limpid viscosity or body, great brilliancy, and perfect rubbing qualities. Their brushing, flowing, and other working properties | are unsurpassed.

Viscolite Exterior is used for all kinds of outside work where exposure to the weather, excessive moisture, dampness, | <sup>100</sup> or salt air are factors.

It is very tough and elastic, sets in four to five hours, dries in 24 | hours, and can be rubbed if desired in 48 hours.

Viscolite Interior is intended to be used for | all kinds of interior finishing such as woodwork, wainscoting, cabinet work, etc. It is pale in color and exceptionally brilliant, | does not set too quickly, dries perfectly hard in 24 hours, and can be rubbed and polished in 48 | hours.

Viscolite Floor Finish is an easy-working, quick-drying, tough, and elastic finish made especially for floors. It | <sup>200</sup> does not mar or scratch easily. It is light in color and suitable for any grade of work. It dried | hard enough to use in 12 hours, becomes perfectly hard in 24 hours, and can be rubbed in 48 | hours.

Viscolite Seat Finish is used for finishing seats of all kinds: chairs, church pews, benches, window seats, school | seats, desks, etc. It does not get sticky in warm weather or from bodily contact, dries hard enough to use | in 12 hours, becomes perfectly hard in 24 hours, and can be rubbed and polished in 48 hours. | <sup>300</sup>

A number of the leading dealers have recently added Viscolite to their stock. Special prices for an initial order are | given in the enclosed price list.

Yours truly, (328)

<sup>10</sup> Pennsylvania Railroad.

7

Mr. F. W. Ferguson,  
 Manager, Industrial Department,  
 John Lucas & Co., Inc.,  
 Philadelphia, Pa.

Dear Mr. Ferguson:

I called at the plant of the Harmony-Butler Company on Tuesday. My judgment is that the difficulty these people have been having in the finishing of their cars is due entirely to local conditions. Their power house is located about fifty yards from their finishing shop. I noticed a great deal of smoke coming from three stacks. When the atmosphere is heavy and the wind in the right direction, smoke and fumes are forced into the shop. I explained to their superintendent that coal gas will cause blooming.

I also inspected a car which was finished with one coat of our Railway Coach. This varnish has gone flat, has checkec badly, and also shows evidences of considerable bloom. Upon investigation I learned that paraffin oil was not used.

I believe that the best thing to do is to have some panels finished at our factory by their method and then make a test for results. If we can show that this varnish gives satisfactory results when applied under proper conditions, then we can demonstrate that the difficulty is due to the conditions at their plant. This will take a little time but is necessary to get the facts.

Their method of finishing is as follows:

One coat of body color #978  
 One coat of white lead primer (gray)  
 One coat of rubbing, which is sanded and followed by two coats of finish.

I do not believe that their method of cleaning cars is conducive to the long life of any varnish. In my judgment the first operation should consist of brushing off all loose particles of dirt which adhere to the surface, after which the car cleaner should be applied. They use the cleaner without first brushing the surface, and the grit which remains cuts the varnish rather quickly.

To sum up the situation, these people are dissatisfied with the finishing varnish because it does not stand up. They believe the gloss should hold for at least one year without showing blooming and similar defects. Kindly let me have your instructions for proceeding further, as something definite must be done quickly to satisfy them.

Yours truly, (363)

8

Mr. B. F. Wright,  
 Manager, Yates Hardware Co.,  
 Asheville, N. C.

Dear Sir:

It is impossible for us to name fixed prices for dry lead and zinc, as the market fluctuates from day to day.<sup>11</sup>

All brands of white lead and whites are put up in 12½, 25, and 100-lb. steel kegs. All brands of

<sup>11</sup> The prices of many commodities are determined by daily market quotations.



zincs and zinc compounds are put up in 12½ and 25-lb. cans, and 100-lb. wooden kegs. A few of the brands are also put up in 1, 2, and 5-lb. cans at an advance of 1¼¢ per 100 pound over the 25-lb. package price.

We believe it would be to your advantage to purchase white leads and combination whites in steel packages. On account of the absorption of the oil the wooden package causes a loss in the quantity available, and necessarily means a certain waste since it is not possible to get all of the material out of the package. Our steel kegs are hermetically sealed. The material is thus kept in perfect condition, even though the packages may be carried in stock for some time. This is not the case with wooden packages. The small sizes are eagerly sought after by painters, as they make ideal paint and varnish pots after the contents of the package have been used.

We note what you say about the weight of packages. All our goods are put up net weight. This fact should be borne in mind when comparing prices with goods put up gross weight.<sup>12</sup> A 12½-lb. can, gross weight, represents approximately 10½ pounds of material and 1½ pounds of package. Lower prices can of course be quoted on gross weight goods than on net weight packages such as we put up.

We have sent you by express sample cans of Arctic Snow White Zinc Compound, Jersey Snow White Zinc Compound, and Pure American Zinc. In case you are prepared to handle large quantities of these goods, we shall be very glad to have you consider our special agency proposition, details of which are given in the enclosed agency contract.

Yours truly, (366)

9

Mr. H. G. Gardner,  
Medford Paint & Oil Co.,  
Medford, Mass.

Dear Sir:

We are very glad to give you the formulas<sup>13</sup> requested in your letter of the 4th instant.

Priming Coat

|                             |            |
|-----------------------------|------------|
| White Lead in Oil           | 100 pounds |
| Raw Linseed Oil             | 3 gallons  |
| Sipe's Japan Oil AA Extra   | 3 gallons  |
| Tint with Lamp Black in Oil |            |

This will make nine gallons of mixed paint.

<sup>12</sup> The gross weight is the total weight of the container (can, keg, etc.) and contents. Net weight means the weight of the contents only.

<sup>13</sup> Plural of formula; also spelled *formulae*.

## Second Coat

|  |           |
|--|-----------|
| White Lead in Oil                      | 85 pounds |
| Zinc Oxide in Oil                      | 15 pounds |
| Raw Linseed Oil                        | 9 pints   |
| Sipe's Japan Oil AA Extra              | 9 pints   |
| Turpentine (or an approved substitute) | 6 pints   |

This will produce six gallons of mixed paint.

Third Coat | <sup>100</sup>

|                             |            |
|-----------------------------|------------|
| White Lead in Oil           | 80 pounds  |
| Zinc Oxide in Oil           | 20 pounds  |
| Raw Linseed Oil             | 2½ gallons |
| Sipe's Japan Oil AA Extra . | 2½ gallons |

This will make eight gallons of mixed paint.

These | formulas combine the results of hundreds of practical and panel tests which we have made under the most exacting conditions. |

All woods contract and expand. To avoid cracking and flaking, we provide a deep penetration of the priming coat by | filling the wood cells with waterproofed oil. When the oil dries, it gives stability to the wood surface to which | <sup>200</sup> the paint adheres.

If the wood cells adjoining the paint coating are filled with reinforced oil, moisture from the back | of the film cannot penetrate through and dislodge the coating. Blistering is thus avoided. The second coat should never be | applied until at least 48 hours have elapsed. The lamp black is used because it prevents the lead from | becoming too brittle, thus giving greater expanding and contracting qualities to the paint.

The second coat contains a much greater | percentage of pigment than of vehicle as compared with the other coats. The mixture insures a thoroughly dry, strong covering | <sup>300</sup> and an egg-shell gloss coat. In both the second and third coats zinc is added to reinforce the lead. | In the finishing coat we use the proper proportions of pigment and reinforced oil to get weather-excluding properties and | to insure a good gloss. Our tests show that white paint mixed in this formula will hold its gloss longer, | will not discolor, will not chalk away as rapidly, and will not "wash" like paint produced with lead, linseed oil, | and dryer.<sup>14</sup> You will find these formulas unusually effective where careful white painting is desired.

Yours very truly, (398)

<sup>14</sup> See footnote 5 on page 60.

10

Mrs. Arthur W. Goodman,  
800 S. Granite St.,  
Peru, Ind.

Dear Madam:

The information blank which you returned was received this morning, and we are pleased to have the opportunity of giving you some practical painting and decorating advice.

From the information given, we understand that there will be very little exterior painting to be done other than the window sashes and frames. We suggest that you use Tinted Gloss Paint, outside white, in preference to brown, because the white will produce a more desirable contrast with the brick.

In regard to the interior decoration, we suggest the use of our WRK-WEL<sup>15</sup> Floor Finish for all floor surfaces. This<sup>100</sup> is a clear varnish made especially for floor use and will give you excellent wear on such a surface.

For the interior woodwork we enclose a color card of our Velvo-Tone Finish. This finish produces a stain, a varnish, and a soft, hand-rubbed effect—just the kind of finish you want. For the kitchen and bedrooms we suggest the old oak shade; for the living room, den, and dining room, either weathered oak or fumed oak.

For the interior walls we recommend the use of LU-CO-FLAT<sup>16</sup> in preference to wall paper. LU-CO-FLAT can be<sup>200</sup> applied over the surface you mention with perfect results. We enclose a specification blank which gives complete instructions for its application under all conditions. It is really a washable wall finish, and you can depend absolutely on the quality of this product. The first cost is the only cost for years. To keep the finish bright and clean you need only remove all surface dust and dirt by an occasional washing with soap and water.

According to the dimensions you have given us, it will take approximately the following quantities to finish the walls and ceilings of the rooms with<sup>200</sup> two coats:

| Room        | Walls         | Ceiling    |
|-------------|---------------|------------|
| Dining Room | 1 3/8 Gallons | 1/2 Gallon |
| Living Room | 2 "           | 1   "      |
| Den         | 1 1/4 "       | 1/2 "      |
| Kitchen     | 1 "           | 1/4 "      |

You have not given us the dimensions of the bedrooms, and consequently we cannot estimate the quantities required for them. You can figure that LU-CO-FLAT will cover an average of 300 square feet per gallon, two coats.

<sup>15</sup> Dictate *Work-Well*. This is a trade name.

<sup>16</sup> The name of this paint is made up of the first two letters in each of the words "Lucas Company."

We trust you will feel free to call on us for any further information you may require.

Yours very truly, (396)

11

Mr. H. M. O'Donnell,  
765 Grace St.,  
Wooster,<sup>17</sup> Ohio.

Dear Sir:

In reference to our telephone conversation on Saturday morning in which you asked for a price on tinted Gloss Paint, Boiled Linseed Oil, and Extra #1 Coach Varnish, we understand that you are in the market for |

|    |            |         |                        |
|----|------------|---------|------------------------|
| 28 | gallons of | # 270   | Tinted Gloss           |
| 28 | "          | " # 228 | " "                    |
| 22 |            | " # 207 | " "                    |
| 42 | "          | "       | Boiled Linseed Oil     |
| 10 | "          | "       | Extra #1 Coach Varnish |

Our price on Tinted Gloss, basis colors mentioned above (with the exception of # 270), is \$1.45 per gallon packed in 5-gallon cans and \$.50 packed | in 1-gallon cans. The price on Tinted Gloss # 270 is \$1.95 per gallon | in 5-gallon cans and \$1.00 in 1-gallon cans.

We quote a price of 59¢ per | gallon (cans extra) on the Boiled Linseed Oil. We charge 75¢ extra for 1-gallon cans and 15¢ | for 1-gallon cans.

Our price on Extra #1 Coach Varnish in 1-gallon cans is \$2.00 | per gallon; in 5-gallon cans, \$1.95. The linseed oil is shipped with the

paint | and varnish, we shall be glad to allow freight on the entire shipment.

The prices given on Tinted Gloss are | our best dealers' prices. In case you must meet competition on a price basis, we suggest that you take on | our line of Metropolitan paints. Metropolitan in ordinary colors will cost \$1.20 per gallon in 5-gallon | cans and \$1.25 in 1-gallon cans. Star shades such as # 327 sell | at \$1.60 in 5-gallon cans and \$1.65 in 1-gallon cans.

Metropolitan | paint is ground in strictly pure linseed oil. It contains a very small percentage of naphtha (not over 5%), | which does not harm the paint in the slightest degree. It is very much like our Tinted Gloss except | that it has a different pigment. Tinted Gloss contains absolutely nothing but pure raw linseed oil in combination with the | necessary pigments and a small percentage of japan drier.

We are in a position to give you prompt service and | trust that we may hear from you favorably.

Yours very truly, (411)

12

the enemies of paint do not always fight in the open some of them attack from the rear one of the most

<sup>17</sup> The spelling of this word is to be distinguished from *Worcester, Mass.* Both are pronounced *wooster*.

destructive of these enemies is wood expansion its action is but little understood because it fights under cover but a brief description of its results may be found in the enclosed leaflet it easily overcomes and destroys a non-elastic coating it wins a quicker victory when the paint film is not waterproofed or reinforced such a paint permits the penetration of moisture to the underlying wood surface whereupon the paint cracks becomes loosened and finally in some cases flakes off entirely there are some coatings however which have such adhesive strength and

elasticity that they keep perfect step with the expansion and contraction of wood such paint coatings are waterproofed and reinforced and consequently shed moisture two or three times longer than paints which are not reinforced the best agent which has yet been discovered to preserve elasticity and to waterproof and reinforce a linseed oil paint and at the same time eliminate the use of harmful concentrated dryers is lucas japan oil the attached mailing card will make it easy to begin reinforcing your linseed oil at once yours very truly

### OFFICE TRAINING ASSIGNMENTS

In this section you are employed in the Philadelphia office of John Lucas & Co., Inc., as a stenographer in the general sales department. Your teacher is the manager of this department.

#### TECHNICAL TERMS

**Assignment.** Make a copy of the technical terms and practice their outlines.

#### ARRANGEMENT

The style letter on page 56 is written in what is known as the *block* style. This is a form which is now quite widely used. Each line in the address and body of the letter begins flush with the margin. Note also the arrangement of the signature. Write all the letters in this section in this form.

**Assignment 1.** Copy the style letter with carbon on a letterhead (form 4). Use the current date and add the initials as usual.

**Assignment 2.** Copy letter 8 with carbon in the same form as the style letter. Use a letterhead.

#### TWO-PAGE LETTERS

When a letter runs over a page, use a plain sheet and not a letterhead for the second page. In order that the second sheet may be readily identified, it is desirable to write the initials of the addressee and the notation "**#2**" at the top of the page. Refer to the second page of the style letter on page 318.

**Assignment 3.** Copy letter 9 with carbon. This will be a two-page letter. At the top of the second page, flush with the margin of the letter, write "Mr. H. G. G. #2." Because of the tabulated matter this letter contains, it will furnish an excellent test of how skilful you have become in applying the principles of effective display. Use a letterhead for the first page of this letter. Submit the three letters for approval.

#### TECHNICAL COPY

The selection given below is from a pamphlet on the finishing of "Concrete and Cement Surfaces," which we issue.

**Assignment 4.** You should not be satisfied with a speed of anything less than fifty words a minute on "straight copy." This passage contains 779 words. Copy the selection without carbon. Your teacher will time you. If you cannot copy it in 16 minutes, write it again. *Are your copies errorless?*

#### CONCRETE FINISHING

Early disintegration has frequently occurred from the addition of improper coloring matter for decorative effects. The colors which have proved the most successful are natural earth pigments, which are practically inert and therefore exert no chemical action. To obtain brilliancy, water soluble dyes are occasionally added, and they have so far shown no harmful effects. The former are to be preferred, however, if the desired color can be obtained, as they are fast to light, while the stains will invariably fade. It is advisable when contemplating finishing concrete in a color to write the suppliers of the cement. They are <sup>100</sup> best capable of dividing as to the coloring materials which can be safely used.

The absorption of grease and oil not only tends to disfigure a concrete surface, but some of the best authorities on concrete construction are of the opinion that a considerable number of these materials have a disintegrating action. Many types and grades of mineral oil, when allowed to penetrate into concrete that was not thoroughly dry, were found to possess a disintegrating influence. Tests made on old surfaces, however, did not show any noticeable indication of deterioration.

The incorporation of linseed oil in a concrete mix <sup>203</sup> has proved that it is as impossible by this means to waterproof or make the concrete impervious to the absorption of oils. The results of these tests were substantiated by leading engineers connected with several large railroads, who were interviewed as to the nature of the investigations they were conducting regarding the treatment of concrete floors.

By the absorption of grease and oil, spots are formed on which dust and disease germs collect and breed. As nothing has yet been found which, when added to concrete, will correct the absorption of oil, it is necessary to overcome the difficulty by painting. It happens many times when a floor is put down in a body layer and a finish coat, that the surface concrete will be loosened when subjected to the continued action of penetrating oils. This same condition is frequently caused by abnormal permeation, although the defect is overcome to a great extent if the surface layer is laid down before the lower has taken its "initial" set.

One of the most undesirable features connected with concrete floors is the continual "dusting," which is caused by the natural grinding action of wear on the surface. Wherever the floor is subjected to hard usage the dust may, besides becoming a source of irritation, prove injurious to the health. The dust readily adheres to the surface of untreated floors in a manner which makes it impossible to remove. Sweeping tends only to aggravate the tendency to "powder," as many small particles are loosened or torn away.

In view of the fact that lime has a saponifying action on oils and that all concrete contains alkali in varying amounts, the first point to consider in painting concrete construction of any kind, outside or inside, is how to treat the surface in order either to eliminate this material by neutralizing it, or in some manner to keep it from exerting its harmful influence on the vehicle portion of the paint which is to be applied. A treatment which has for its object the elimination of whatever free alkali is present on and near the surface will, in practically every instance, prove injurious to the concrete. The use of mineral acids, while neutralizing the lime, will detract from the life of the structure. Solutions of materials which change the lime to insoluble salts that do not act on oils have been suggested from time to time, and have been used with varying success. The general results of experiments along this line indicate, however, that it is not advisable to attempt the elimination or change of the alkali to some other form by chemical reagents.

The most satisfactory results up to the present time have been obtained by the use of a thin varnish-like mixture, which is especially adapted for work of this character. This filler is practically a wash, which penetrates into the concrete and destroys whatever action the alkali would have on an oil paint coat. In the process of neutralizing any free alkali with which this filler comes into direct contact, products are formed which

assist in making a thorough bond within the concrete without weakening the structure. Capillarity is destroyed by the oxidized film which results from drying. This makes the passage of moisture through the paint coat impossible. The paint coat which follows the filler can then be selected to obtain the desired decoration, and will assist in correcting all the forces that exert deteriorating influences on naked concrete. (779 words)

## BILLING

A bill is a statement setting forth the amount of a debt, usually for goods sold or services rendered, with items, prices, and terms stated in detail. A bill, when received from another, is often called an *invoice*.

**John Lucas & Co., Inc.**  
**Paint and Varnish Makers**  
 322-330 Race Street

Reg. No. A-7949

PHILADELPHIA, PA. 5-14.....19.20.

**Sold To** R W Austin & Co  
 467 Railroad St  
 Altoona Pa

Ship Via P R R Frt

Terms 60-1-10

FOB Altoona

No claims allowed unless made within ten days from receipt of goods.  
 We disclaim responsibility for leakage or breakage when goods shipped are recelated for in good condition.

|                                  |         |        |             |      |
|----------------------------------|---------|--------|-------------|------|
| 1/2 Lu-Co-Flat White             | -1 can  | \$2.60 | 1.30        |      |
| 1/4 Velvo-Tone Zarina Green      | -1 can  | 2.80   | .70         |      |
| 1/2 Lucas Tinted Gloss Vermilion | -2 cans | 2.90   | 2.90        |      |
| 5 Metropolitan Ready Mixed       | -1 can  | 1.75   | <u>8.75</u> |      |
|                                  |         |        | 15.65       |      |
|                                  | 25-10   |        | <u>4.43</u> |      |
|                                  |         |        |             | 9.22 |

## ILLUSTRATION 6—BILL OR INVOICE

The typewriter is now widely used in the preparation of bills. One of our regular bills is shown above. Each customer has a register number, which is put on all bills issued to him. It is customary in making out bills to express the entire date in figures. May 16, 1920, is thus written: 5-16-20. Our regular terms are 60 days or 1% for cash in ten days (indicated on the billhead by the figures 60-1-10); that is, the bill is payable at its face not later than 60 days from date, but for payment within 10 days from date a discount of 1% may be deducted. Unless otherwise specified all shipments are made f. o. b. Philadelphia.



We also allow *trade* discounts, which differ in amount with the kind of goods sold; thus on the bill shown in illustration 6 we have deducted trade discounts of 25% and 10%. In finding the net amount of the bill the discount of 25%, amounting to \$3.41, was deducted from the gross amount of the bill, \$13.65. From the difference, \$10.24, the second discount of 10%, or \$1.02, was taken. The sum of these discounts, \$4.43, was deducted from the gross amount and the result, \$9.22, is the net amount of the bill.

The fractions at the beginning of each item indicate the amount of paint which the can contains—1/2 gallon, 1/4 gallon, etc. All our prices are quoted by the gallon unless otherwise stated. When cans containing less than a gallon are sold, the price per gallon is slightly higher. The first item in the bill is for one can containing one-half gallon of Lu-Co-Flat White billed at the rate of \$2.60 a gallon.

**Assignment 5.** On form 5 make an exact copy of the above bill. Use plain paper cut to the size of the billhead for the carbon copy.

**Assignment 6.** Prepare bills with carbons on the other billheads in the budget marked "form 5," from the following information handed to you by our bookkeeper. Use the current date and quote the regular terms.

Sold to Owens Hardware Co., 432 Ellsworth Ave., Bucyrus, Ohio, Reg. No. O-241, shipped by P R R frt.

Two 1/2 gallon cans Lu-Co-Flat Green at \$2.60

One 5 gallon can Lucas Cement Filler at \$2.20

Four 1/2 gallon cans Lucas Iron Oxide Maroon at \$1.90

Extend the items. The gross amount of the bill is \$17.40. From this amount deduct discounts of 20 and 10%, which amount to \$4.87. Find the net amount of the bill and extend it.

Sold to Pindell & Spencer, 642 Lindsay Square, Mt. Carmel, Pa., Reg. No. P-65, shipped by P & R frt. f. o. b. Mt. Carmel.

Five 1/2 gallon cans Metropolitan Flat White at \$2.40

Four 1/2 gallon cans Metropolitan True Pink at \$2.60

Two 5 gallon cans Lucas Tinted Gloss Blue at \$2.25

One 1 gallon can Lucas Barn Paint Moss Green at \$1.40

Five 1/2 gallon cans Lu-Co-Flat at \$2.70

Extend the items and find the gross amount of the bill. From the gross amount we allowed discounts of 25% and 10%, which amount to \$13.60. Find the net amount of the bill.

Sold to R. J. Hutchison, 6421 Turner St., Hamilton, Ontario, Canada, Reg. No. H-216, shipped by P R R frt.

Ten 1 gallon cans Calumet Barn Paint Gray at \$1.10

Five 1/2 gallon cans Lucas Silo Paint Green at \$1.30

Four 1 gallon cans Lucas Concrete Paint Exterior White at \$1.70

Two 1/2 gallon cans Lucas Wagon Paint Black at \$1.80

Extend the items, find the gross amount of the bill, deduct discounts of 20% and 10%, and complete the bill.

Sold to Livingstone Paint & Varnish Co., Wakefield, Mass., Reg. No. L-148, shipped by B & O frt. f. o b. delivery point.

Four 5 gallon cans Lucas Rustic Shingle Stain at \$.95

One 1/2 gallon can Mirac Varnish Remover at \$1.90

One 5 gallon can Lucas Ready Mixed Graphite at \$1.55

One 25 pound can Lucas Flat Brick Paint at \$.09 per lb.

Two 12 1/2 lb. cans Lucas Tinted Paste Venetian Red at \$.10 per lb.

Three 1 gallon cans Lucas Barn Paint Moss Green at \$1.40

Eight 1/2 gallon cans Iron Oxide Paint Moss Green at \$1.30

Make the extensions. We allowed discounts of 25% and 10%. Complete the bill.

Sold to Kreyling Bros., 401 Hampton St., Norfolk, Va., Reg. No. K-309, shipped by P B & W frt.

Six 1/2 gallon cans Lucas Floor Paint at \$2.20

Two 1/4 gallon cans Lu-Co-Flat at \$1.90

Eighteen 1/2 gallon cans Lu-Co-Flat at \$1.80

One 5 gallon can Silica Liquid Wood Filler at \$1.60

One 10 lb. can Lucas Paste Shingle Stain at \$.20½ per lb.

Two 25 lb. cans Lucas Flat Brick Paint Dark Brick Red at \$.18 per lb.

One 12½ lb. can Lucas Tinted Paste Paint at \$.15 per lb.

Deduct a discount of 33 1/3% and complete the bill.

Hand in the bills to the manager for checking. Keep the carbons in your folder.

#### PUNCTUATION AND PARAGRAPHING

**Assignment 7.** Letter 12 is one of our regular follow-up sales letters. Read the letter through and decide upon the punctuation and paragraphing. The manager asks you to write this letter without carbon to the following:

Fulton Hardware Company, 422 Hanover Street, Trenton, N. J.

The K. C. Brand Company, Ardmore, Pa.

#### TRANSCRIBING

**Assignment 8.** The manager will dictate to you five letters from our correspondence. Transcribe them in the form of the style letter. Present for signature.

## FILING

The Shannon file is sometimes used for the filing of bills, estimates, and other papers. The file consists of a board with a double arch at one end. These arches may be opened at the tops. Papers to be filed are perforated with a device which accompanies the file and then slipped over the arches. The file is equipped with a set of guides indexed alphabetically by tabs at the side. (Illustration 7.) In filing the carbon of the bill to R. W. Austin & Co., for instance, it is only neces-

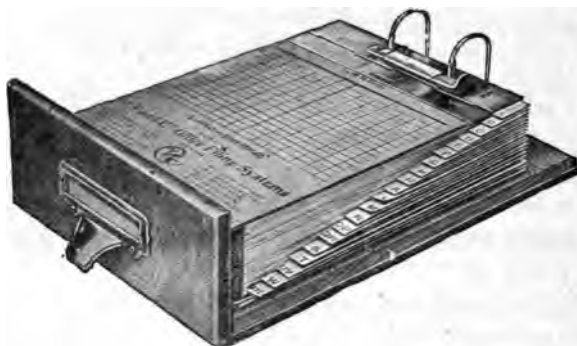


ILLUSTRATION 7—SHANNON FILE

sary to raise the "A" guide and push it back over the arches. The arches are then opened and the bill inserted. To file the next bill to the Owens Hardware Company the arches must be closed, the "O" tab located, and all papers including the "O" guide thrown back over the arches. Always file *back* of the index letters.

**Assignment 9.** File the carbon copies of the six bills you have prepared in the Shannon file. File the carbons of the letters in the vertical file as instructed in the last section.

## SECRETARIAL PRACTICE

A secretary's usefulness is greatly handicapped if his temperament is such that he finds it "hard to get along" with his co-workers. In a certain sense he must subordinate his personality to that of his chief. This does not mean that he is to be fawning or subservient. When the secretary has proved his worth, his chief will be glad to receive suggestions from him.

In the more important positions the secretary will have stenographers, typists, or clerks under his direction. Unfailing courtesy is the secret of working in harmony with others. Efficiency flies out of the window when friction comes in at the door. The wise secretary's relations with his co-workers are characterized

by an attitude of cheerfulness and helpfulness. He believes in his chief and is loyal to the business with which he is associated.

The qualities which make for "team-work" in business can be cultivated. You may have brilliant mental powers, keen perceptions, and excellent training, yet these will profit you little if you have not developed the habit of cooperation. All business is built on cooperative effort.

**Assignment 10.** The manager: "Better follow up the Steele Canning Co. and the Murray Top Co. (letters 1 and 2) and inquire whether the printed material we sent them was received. Express our interest in their problems and assure them that the services of our laboratory staff are at their disposal. I'll sign the letters."

**Assignment 11.** The manager: "Here is a letter (No. 7) from R. F. Brandon, one of our salesmen, now at Pittsburgh. Wire him that the finishing of the panels was begun this morning following his suggestion. Ask him to let us know how much of our product the customer uses in a year." On looking up Brandon's itinerary you find that he is staying at the Fort Pitt Hotel.

**Assignment 12.** The manager: "You can write the Harmony-Butler Co., too. Tell them we're interested in Brandon's report of their problem. Mention the fact that we are finishing these special panels. That's an important letter. Evidently the conditions at their plant are bad; still we want to keep their business. Let me see the letter."

**Assignment 13.** The manager: "We must send copy for our ad in the next month's issue of the *Hardware Age*. I think we had better feature Viscolite. Suppose you see what sort of an ad you can write. The letter I wrote the Reese Supply Co. (letter 6) the other day contains all the information you need. We have only a quarter page, so you'll have to make your sentences short and concise."

**Assignment 14.** The manager: "We have had an inquiry from Kreyling Bros. (page 73) about our cement pamphlet (page 69). Send them a copy and tell them that we shall be glad to place our laboratory service at their disposal if they will tell us the details of their problem."

**Assignment 15.** The manager: "Make out cards for the firms to whom we have sent bills (pages 71, 72, 73) so that we can enter them in our follow-up file." (Any ordinary index card will serve the purpose.)

**Assignment 16.** From your practice and observation prepare a brief memorandum stating the advantages of vertical filing over flat filing.

SUBJECT: Weight Agreement - Elyria Manufacturing Company, Elyria, Ohio

## The Baltimore & Ohio Railroad Company

FREIGHT DEPARTMENT  
OFFICE OF DIVISION FREIGHT AGENT

IN YOUR REPLY REFER TO  
NO. 145

YOUR FILE: 1047-B

Pittsburgh, Pa. February 4,  
1920.

Mr. J. K. Babson,  
Division Freight Agent,  
Elyria, Ohio.

Dear Sir:

For your information we quote the following order from Chief Inspector Hanlon of the Central Freight Association Inspection and Weighing Bureau, Chicago, dated January 28:

"Notice is hereby given of consummation of weight agreement with the Elyria Manufacturing Company, Elyria, Ohio, effective June 10, covering outbound carload shipments of automobile parts.

The above named shipper will be supplied with bureau certificate stamp No. 2185, and when impress of this stamp appears on shipping order with correct weight inserted in the space provided and affirmed over shipper's signature, it will be permissible to accept and use the description and weight so tendered as basis for accepting transportation charges (minimum weights to be observed) and to place imprint of bureau general agreement stamp on revenue billing to protect it.

Unless shipping order is certified in the manner prescribed, shipper's weight should not be accepted; on the contrary, the traffic should be weighed and charges assessed on basis of weight obtained on railroad scales, and agreement stamp should be withheld from revenue billing. Your agents have heretofore been supplied with weight agreement stamp for use in certifying way-bills."

Please issue the necessary instructions to interested agents in order to put this agreement into effect on the date specified.

Yours truly,



Asst. Division Freight Agent

BAC-4

## RAILROAD SECTION

### TECHNICAL TERMS

- of lading**—a written acknowledgment of the receipt of certain goods by a common carrier,<sup>1</sup> who promises for a consideration to transport and deliver them at a certain place to a person therein named or his order.
- et car**—a restaurant car.
- sification**—the act of arranging in groups or classes; as, a *rate classification sheet*.
- modity rates**—freight rates on merchandise and other articles of commerce.
- shipment**—a shipment of merchandise. A *consignor* is a person who makes a shipment. A *consignee* is a person to whom a shipment is sent.
- pling**—a device for uniting two railroad cars.
- t**—facts; something assumed, known, or conceded for the basis of a discussion.
- erential**—making a difference; special. *Differential rates* are special rates on specified commodities or to specified parties or shipping points.
- ket**—a list of causes in court or before a commission for hearing, arranged in the order in which they are to be called; a digest.
- oute**—on the way; upon the road.
- ansit**—in the course of shipment.
- astate**—within a state as distinguished from *interstate*, meaning between states.
- terage**—the charge for loading or unloading vessels.
- ifest**—a list or invoice of freight or express shipments, containing a description of each package of goods.
- age**—total number of miles; the charge for traveling reckoned by the mile.
- in territory**—For railroad freight rate purposes the United States is divided into sections. *Origin territory* is one of such sections from which shipments are made to another section.
- man**—a kind of sleeping car (named after the inventor).
- nd**—a return of the whole or a part of a charge made for transporting passengers or merchandise.
- ng stock**—the cars, engines, etc., of a railroad.
- ing**—designating the lines and transfer points over and through which a shipment shall proceed from the point of shipment to its destination.
- t haul**—a term applied to goods which are carried but a short distance, as distinguished from those carried a long distance and termed *long haul*.
- ciled**—applied to containers marked by a stencil, which is a plate in which figures or letters are cut.

<sup>1</sup> A company, such as a railroad, steamship line, etc., which undertakes for hire to transport goods and passengers from one place to another for any who choose to employ it.

- tare**—the weight of a container, such as a box, barrel, etc.
- tariff**—a list or schedule of charges.
- traffic**—the coming and going of persons, or the transportation of goods along a line of travel.
- transcontinental**—across the continent.
- triplicate**—made with three impressions (an original and two carbons), as distinguished from duplicate, made with two impressions.
- validate**—to confirm; to make good by proper means (such as stamping, punching, etc.).
- vestibuled train**—a train of passenger cars each of which is provided with a “vestibule” at each end; that is, a part of the platform is so enclosed at the sides that when the cars are coupled, a continuous passage from car to car is formed.
- via**—by way of.
- way-bill**—a detailed list and description sent with goods shipped.

## CORRESPONDENCE

1

Morton Drug Manufacturing Co.,  
342 N. Sutton Street,  
Columbus, Ohio.

Gentlemen:

We have your letter of January 18 with reference to delay on one box of drugs from Columbus, January 12, consigned to B. H. Royer, Bridgeport, W. Va.

This shipment was billed on Columbus to Bridgeport way-bill<sup>2</sup> 3422, January 12, carded Clarksburg, same date, Southern 38865.<sup>3</sup> Upon taking the matter up with the General Superintendent of Transportation, we were informed that this shipment was transferred at Clarksburg on January 15 into S. P.<sup>4</sup>

<sup>2</sup> Way-bills are made up each day on which are entered all shipments made between given points.

<sup>3</sup> This means Southern Railway Car # 38865.

<sup>4</sup> Southern Pacific.

<sup>5</sup> This is a reply to a tracer letter sent to the railroad company by the shipper, the Morton Drug Manufacturing Co.

<sup>6</sup> Abbreviation for hundred weight.

<sup>7</sup> Abbreviation for Interstate Commerce Commission. This Commission by virtue of the Interstate Commerce Law regulates commerce between states when carried wholly or partly by rail. The Commission publishes decisions as to rates, classifications of freight, etc.

3354. Because the following day was Sunday and the local freight was not running, the \$100 shipment was not moved until January 18, arriving at destination January 19.<sup>5</sup>

Yours very truly, (115)

2

Mr. H. B. Tucker,  
Division Freight Agent,  
Lehigh Valley Railroad,  
Jersey City, N. J.

Dear Sir:

I am returning herewith the papers received with your letter of the 4th.

Upon investigating the matter, I find that the rate of 61¢ per cwt.,<sup>6</sup> as originally assessed and as published in Lehigh Valley I.C.C.<sup>7</sup>

12567, is correct. This is a commodity rate (Rule 22, Southern Classification) taking precedence | over the 6th class rate of 45¢, which shippers and consignees are claiming.

The commodity rate was apparently | overlooked by the former rate clerk in this office, who quoted the 6th class basis, which the consignees have asked | <sup>100</sup> us to protect. In view of the stipulations in the rate referred to above, I cannot see how we can | apply anything but the commodity rate.

Yours very truly, (129)

3

Mr. R. M. Weldon,  
Division Freight Agent,  
Baltimore, Md.

Dear Sir:

We quote a letter of December 30 from the Wheeling Manufacturing Company, Wheeling, W. Va. No action is | to be taken toward diverting these cars from Locust Point to New York until we give you further instructions.

"We | refer to the following cars shipped from Whiting, Indiana, on December 27, loaded with wax and consigned to Messrs. | Moore and Cleland, c/o Furness-Johnston-Manchester Line, Locust Point, Baltimore, Md., for export, lighterage free:

ACL<sup>8</sup> 26578  
C of Ga<sup>9</sup> 7807  
NYC<sup>10</sup> 198730

On | <sup>100</sup> account of the present difficulty in securing ocean transportation, we may find it necessary to divert these cars to New | York. We therefore ask that you kindly hold these cars at some junction point in order that they may be | moved to New York should we find it necessary. We have taken the matter up with our forwarding agents at | New York and will inform you within the next few days to which port we want the cars delivered."

Pending | receipt of further instructions, hold these cars on the Sykesville cut-off for possible re-routing to New York.

Yours | <sup>200</sup> very truly, (202)

4

Steel Bars, rate, Johnstown, Pa., to  
Kenosha, Wis. File 12424-B<sup>11</sup>

Mr. A. M. Rutledge,  
General Freight Agent,<sup>12</sup>  
Chicago & Northwestern  
Railway Co.,  
Chicago, Ill.

Dear Sir:

Please refer to your File 21721-L with regard to shipments of coil bar

<sup>8</sup> Atlantic Coast Line. <sup>9</sup> Central of Georgia Railway. <sup>10</sup> New York Central.

<sup>11</sup> A common practice in railway offices is to write the subject of the letter and its file number at the top of the page. See the style letter on page 76.

<sup>12</sup> In the case of a long title, it is preferable to make four lines of the address.



steel | from the Crucible Steel Company, Johnstown, Pa., to Barton Bros., Kenosha, Wis., on which the bar steel rating has been | applied. I enclose a copy of a letter from District Inspector Carson to Mr. Kendall, Asst. D. F. A.<sup>13</sup> at | Pittsburgh, which coincides with your view as to the rating applicable on these shipments.

Barton Bros. have just called our | attention to the following clause in our I.C.C. 12561, page 9:

"The foregoing will not |<sup>100</sup> apply on bars either square, round, or otherwise shaped on which any work has been done, except that of galvanizing, | drawing, grinding, hammering, or rolling."

They claim that this material is square edge bar finish nut steel in coils, and | insist that the stipulation above quoted excludes the application of the rate now in force.

In view of the developments | in connection with this movement and the volume of traffic involved, it seems advisable that you arrange to have your | inspector make a careful investigation at Johnstown, as we feel that such investigation may develop sufficient reasons to justify you |<sup>200</sup> in changing your previous ruling on the rating of this traffic.

Truly yours, (213)

<sup>13</sup> Division Freight Agent.

<sup>14</sup> Central Freight Association.

<sup>15</sup> Refer to the definition of "origin territory."

5

Agricultural Implement Rates between C. F. A.<sup>14</sup> Points  
File 237-B Part 2

Mr. R. A. Browning, D. F. A., Columbus, Ohio,  
Mr. F. K. Darling, D. F. A., Youngstown, Ohio,  
Mr. C. R. Morrison, D. F. A., Cleveland, Ohio.  
Gentlemen:

You have no doubt received the circular letter from Chairman McCormick dated December 28, notifying us that revised | mileage scale basis rates on agricultural implements between points in C. F. A. territory covered by Information 12437 | have been indefinitely postponed, and in lieu thereof C. F. A. lines are to proceed to prepare and file | tariffs showing advanced rates on such freight, intrastate and interstate, between points in C. F. A. territory, based on the | present tariffs plus 5%, these rates to take effect March 15 next.

From the data you furnished this |<sup>100</sup> office in connection with Information 12437, the Tariff Department is uncertain as to just what action should | be taken now to follow out the instructions in the letter referred to. Shall we simply advance our present rates | 5%, or shall we arrange to eliminate the origin<sup>15</sup> and destination points which

have indicated can be | can-  
 l? In addition, what action  
 ld be taken in connection with  
 rates and points covered by  
 data, but | not provided for in  
 present publication?

We suggest that you carefully  
 w the data submitted and re-  
 t that you |<sup>200</sup> instruct us fully in  
 r that work on these tariffs  
 be commenced at once in order  
 ave them | ready by March 15.

Yours very truly, (227)

6

.. Ogden & Co.,  
 Keystone Road,

Elmira, N. Y.

lemen:

We received your letter of No-  
 ver 25, File 106-C, relative to  
 ht on N. Y. C. | car 14674

Elmira, November 15, destined  
 linton, Mass., which was weighed  
 almer truck | scales showing net  
 0 lbs. as against your estimated  
 ht of 43,640 | lbs.

This question was taken up with  
 Supervisor of Scales and Weigh-  
 Mr. Oberman, who has today  
 en | us as follows:

"It has been impossible to de-  
 any error in connection with  
 weighing of car referred to |<sup>100</sup> in  
 nclosures received with yours of  
 mber 15.

I understand that many of the  
 n products are shipped in | re-  
 ator cars in winter, and I think  
 Ogden Company can well afford  
 require the weighing of cars be-

fore | loading, the charge for such  
 service to be made in accordance  
 with Weighing Circular 660. This  
 circular provides that | if the differ-  
 ence between the stenciled tare and  
 actual tare exceeds 1% of the net  
 load, with a | minimum of 500 lbs.,  
 no charge is to be made for weighing.

If the Ogden Company has re-  
 cently checked |<sup>200</sup> the weights of  
 their packages and is confident of  
 their estimated weights, we shall  
 accept correction on the basis of |  
 their weights, but without estab-  
 lishing a precedent. If many simi-  
 lar cases occur this winter, it will  
 be necessary to go | into the matter  
 more thoroughly and remedy the  
 trouble wherever it may lie."

Yours very truly, (256)

7

Mr. E. A. Kirkpatrick,  
 Traffic Superintendent,  
 Pennsylvania Railroad Co.,  
 Philadelphia, Pa.

Dear Sir:

Your Embargo No. 2736, Janu-  
 ary 7, embargoes all shipments ex-  
 cept live stock and perishable freight.  
 | The C. R. Verner Company has  
 been shipping perishable freight in  
 refrigerator cars. Today the traffic  
 manager of the Verner | Company is  
 in receipt of information from their  
 New York office to the effect that our  
 New York office has | declined to  
 handle some shipments that arrived  
 at New York in split cars; i.e.,<sup>16</sup> in  
 cars containing partly domestic |  
 and partly export freight. On the

<sup>16</sup> Abbreviation for *that* is.

3d<sup>17</sup> instant the Verner Company forwarded to New York P. R. R. car 14367, | <sup>100</sup> which car contains some goods for export. Their traffic manager also informs me that they will have | about seventeen cars for Liverpool to load next week. The Verner Company has booked 560,000 #<sup>18</sup> on | the steamer "Cymric" to sail from New York on February 23; in addition, they have booked 225,000 # | on the steamer "Dominion" to sail from Philadelphia during the latter part of this month.

Before loading | these goods Traffic Manager O'Connell of the Verner Company has requested me to bring the matter to your attention; he | <sup>200</sup> further requests that you arrange to issue such instructions as will prevent our New York people from holding up these | shipments upon their arrival at the seaboard.

Kindly wire me not later than Monday, February 7, as to what action | will be taken to protect this movement. If desired, I shall arrange with the Verner Company to furnish us advance | information as the cars are loaded, and I shall be glad to wire this information to your office or to | any other office you may designate.

Yours very truly, (289)

<sup>17</sup> Write 2d and 3d rather than 2nd and 3rd.

<sup>18</sup> The sign # is used to express pounds

<sup>19</sup> Illinois Central Railroad

8

Mr. T. W. Pyle,  
Passenger Traffic Manager,  
Louisville, Henderson & St.  
Louis Railroad,  
St. Louis, Mo.

Dear Sir:

I have your letter of March 5 in further reference to the claim of L. T. Sheridan for | refund of fare paid over our line from Louisville, Ky., to Owensboro, Ky., presumably on July 28 last, while | he was holding Pennsylvania Railroad Ticket FX-1465 reading from Philadelphia, Pa., to Owensboro, Ky., routed via | Louisville and your line.

I return your entire file in this case. Kindly inform me how you received the impression | that this gentleman paid a cash fare over our line. The letter of Ticket Agent Morris of Owensboro to your | <sup>100</sup> Mr. Simpson dated August 4, included in this correspondence, states that the claimant failed to secure a receipt because he | did not know it was necessary for him to have one. After reading the entire file, I do not find | anything to indicate that Mr. Sheridan paid a cash fare over our line. In the original application for a refund | the claimant states that he took the 12:01 train out of Louisville on the I. C. R.,<sup>19</sup> which | is our train # 101. Upon investigation I

hat there were no cash fares  
ed on this <sup>200</sup> train between  
ville and Owensboro on July 27,  
29.

nder the circumstances it will  
ecessary for us to have some  
entary evidence to show that a  
as actually paid over our line  
en | these points before any re-  
an be made. As the claim was  
ally presented to you on the  
used | ticket, and since the  
rder of the claim papers have  
been received in this office, I  
ne you will | wish to con-  
the investigation of the case.

Yours truly, (290)

9

ile, Rates—Barberton, Ohio, to  
Canadian Points

. C. Wrightson,  
General Freight Traffic Manager,  
Baltimore, Md.

Sir:

The Prentiss-Walker Company,  
rton, Ohio, manufacturers of  
e, are endeavoring to establish a  
t for their | product in Can-  
The Official Classification does  
pecifically provide a rating on  
le, but does provide for hollow |  
ng tile as 6th class, minimum  
t 36,000 pounds. As hollow  
ng tile and silo tile are practi-  
| the same commodity, the lat-  
s been moving under the rates  
led on the former.

The tile for a complete | silo  
weighs from 18 to 22 tons. Since  
our published I. C. C. 14032 through  
rates | <sup>100</sup> on hollow building tile show  
a minimum weight of 50,000 pounds,  
the movement of this company's  
product at such | rates is prohibi-  
tive.<sup>20</sup> The present commodity rates  
on such products from origin terri-  
tory covered by this tariff to Canad-  
ian points | are based on combina-  
tions to and from Detroit and the Ni-  
agara frontier. In many instances it  
has been found necessary | to can-  
cel commodity rates for the reason  
that they exceeded the through 6th  
class rate, there being but slight dif-  
ference | between the through rates  
covered by the tariff and the 6th  
class rate.

As nothing but silo tile is manu-  
factured | <sup>200</sup> at Barberton, the ship-  
per's proposition is that hollow  
building tile be eliminated from the  
brick list as far as this | point is  
concerned, thereby permitting the 6th  
class rate and minimum of 36,000  
pounds to apply on future | ship-  
ments for Canadian points. They  
claim that this action will stimulate  
the traffic to the territory in question,  
which cannot | at present move on a  
minimum of 50,000 pounds.

We recommend the acceptance  
of this proposition and request au-  
thority | to arrange with the Tariff  
Department to put it into effect.

Yours very truly, (294)

<sup>20</sup> That is, these rates are so high that the company cannot profitably make shipments.

10

The H. C. Niles Company,  
Price and Upland Streets,  
Duquesne, Pa.

Gentlemen:

We have your letter of November 14 in regard to storage rates in effect at the Baltimore & Ohio Pittsburgh Warehouse. Our rates on pancake mixture for monthly periods are given in the enclosed tariff, I. C. C. 14875. The weights shown are approximate. When there is a material difference between the actual weights of the packages and these estimated weights, the rates are proportionate. Your small cases would come between the first and second divisions, while the larger cases would be taken at the 50-lb. rate.

Cars may be consigned to the Allegheny, Junction Transfer, or Grant and Water Street Stations in Pittsburgh. Distribution will be made to patrons without extra charge provided orders are received in time to perform the work within the free time period, which is 48 hours from the first 7 A.M. after notice of arrival.<sup>21</sup> You need only notify the agent in Pittsburgh that you desire to have the goods unloaded on the platform, sending your delivery orders to him. These orders may include deliveries to the warehouse, which are made free of charge from these stations.

If you desire to make reshipment via our line it will be necessary for you to make out the bills of lading and mark your shipments according to Official Classification provisions, unless you first order the goods into the storage warehouse, in which case we make out the bills of lading, mark the shipments, and forward them for you within the free time period at a charge of 30¢ per ton, minimum charge 50¢, plus a charge of ½¢ per package to cover the cost of marking and mailing the bills of lading.

Goods consigned to the Baltimore & Ohio Pittsburgh Warehouse direct and delivered within the 48-hour period are entitled to the tonnage rate, which on your commodity is 30¢ per ton. After the 48-hour period a month's storage is assessed.

Yours very truly, (334)

11

Mr. C. S. Poore,  
General Freight Traffic Manager,  
Pittsburgh, Pa.

Dear Sir:

We received your telegram of even<sup>22</sup> date informing us that the J. W. Thompson Company has requested suspension of Item 129-C, Supplement 69, I.C.C. 11647, B. & O. Exception Sheet. This item provides for the cancelation of 5th class rating on elbows, stove pipe, hods,

<sup>21</sup> After the expiration of such "free time," storage charges are assessed on shipments.

<sup>22</sup> In letters from one office of a railway company to another office of the same company the name of the railway is usually omitted.

<sup>23</sup> Same date.

dripping pans, etc., from | arbitrary territory<sup>24</sup> east of Pittsburgh, including Parkersburg, and stations west thereof to Chicago, Peoria, St. Paul, and Mississippi River points | on traffic destined beyond. The Official Classification rating is thereby restored.

Exception to the classification covering this mixture was made | <sup>100</sup> necessary in order to place our shippers on a parity<sup>25</sup> with those located at Chicago, Peoria, and St. Louis, who | had the benefit of the Western Classification, which provided for this mixture in carload lots on the basis of 5th | class rate.

However, the Western Trunk Line, per W.T.L.<sup>26</sup> Circular I-K, I.C.C. A-518, | Item 1460, cancelled the 5th class rating subject to minimum carload weight of 24,000 lbs. on straight | or mixed carloads of stove pipe iron, cut in shape for stove pipe, nested; also on stove pipe, stove pipe | <sup>200</sup> elbows, and coal hods. The cancellation applies likewise to these articles when in mixed carloads with sheet iron dripping pans | and stove boards. A hearing on complaints on the ruling was held, and the Interstate Commerce Commission decision in I. & S. | Docket<sup>27</sup> 543, Page 445, Item 7, contains the following statement:

“Elimination of provision for | 5th class rating

on straight or mixed carload shipments of stove pipe iron, stove pipe, stove pipe elbows, and coal | hods, and for mixed carloads of foregoing articles, and sheet iron dripping pans and stove elbows is authorized.”

Inasmuch<sup>28</sup> as | <sup>200</sup> the Western Trunk Line roads, with the approval of the Interstate Commerce Commission, have canceled the commodity rating which was | the basis for the establishment of the 5th class rating issued by the Central Freight Association lines, it follows that | there is no longer any necessity for a lower basis from Central Freight Association territory than that provided by the | Official Classification.

Yours truly, (364)

12

the following ruling of the interstate commerce commission is forwarded to you for your information on traffic moving between points on the b & o railway having origin and destination in ohio and entire transportation over b & o railway within the state of ohio the rates named in ohio local tariff no 5-c or reissue thereof when lower on the articles named therein will be applied in preference to the rates in new rate book published under date of january 1 on traffic to or from points in ohio on

<sup>24</sup> That is, territory within certain determined limits.

<sup>25</sup> Equality.

<sup>26</sup> Western Trunk Line.

<sup>27</sup> “I and S Docket” stands for “Investigation and Suspension Docket.”

<sup>28</sup> The phrase *inasmuch as* is written as two words.

connecting roads having origin destination and entire transportation within the state of ohio the b & o railways proportion to or from the ohio junction points must not exceed the rates named in table of maximum class rates no 2 and table of maximum commodity rates no 4 in ohio local tariff no 5-c or reissue thereof on the articles named therein on traffic moving between points on cincinnati hamilton & dayton railroad within the state of ohio the rates named in c h & d tariff no 300-a or reissue thereof when lower on the

articles named therein will be applied in preference to the rates named in new rate book published january 1 on traffic to or from points in ohio on connecting roads having origin destination and entire transportation within the state of ohio the cincinnati hamilton & dayton railroads proportion to or from ohio junction points must not exceed the rates named in table of class rates no 2 and table of commodity rates no 2 in c h & d tariff no 350-a or reissue thereof on articles named therein yours truly

#### OFFICE TRAINING ASSIGNMENTS

In this section you are employed as a stenographer in the office of the division freight agent of the Baltimore & Ohio Railroad Co. at Pittsburgh, Pa. Your teacher is the division freight agent.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

When a letter contains a quoted paragraph or paragraphs, it is desirable to make the quotation stand out from the body of the letter. Observe how this is done in the style letter on page 76. These quoted paragraphs exemplify the terse diction commonly employed in drafting orders, rules, and regulations. Note the absence of articles.

In large offices where many stenographers are employed, a number is frequently assigned to each stenographer. Instead of writing her initials, she writes the number assigned to her after the dictator's initials. "RAC-4" shows that the style letter was dictated by Mr. Cole to stenographer number 4.

**Assignment 1.** Make a copy of the style letter with carbon on a letterhead (form 6). You are stenographer number 3.

**Assignment 2.** Copy letter 6 on a letterhead with carbon. Note that the last three paragraphs of the letter are quoted. Present the letters for signature.

## THE MIMEOGRAPH

In many lines of business, machines of the type of the Edison Mimeograph, the Underwood Duplicator, and the Neostyle are used for producing duplicate copies of form letters, circulars, price lists, etc. A sheet of prepared stencil paper is placed in the typewriter, on which the matter to be reproduced is written as usual except that no ribbon is used. The type cuts the stencil sheet so that when it is placed on the mimeograph the ink passes through to the paper on which the copies are to be made. Before cutting a stencil on the typewriter, the type should be thoroughly cleaned in order that the impression on the stencil sheet may be sharp and distinct.

You should learn how to throw the ribbon mechanism on your typewriter out of action. Literature and instruction booklets explaining the operation of the mimeograph can be obtained from the manufacturers or distributors of the machines mentioned above.

## PUNCTUATION AND PARAGRAPHING

**Assignment 3.** Letter 12 contains a ruling of the Interstate Commerce Commission, copies of which we wish to transmit to freight agents in our division.

Determine upon the punctuation and paragraphing of the letter and make a rewritten copy in good form. With this copy before you, cut a stencil and run off forty copies on the mimeograph.

## THE TELEPHONE

The telephone has become indispensable in the conduct of modern business. Good telephone service, however, depends largely upon the measure of co-operation accorded the telephone company by the public. One of the large telephone companies issues the following suggestions for facilitating the successful operation of the service:

## On All Outgoing Calls

Always look in the telephone book to make sure you call the right number. If you do not find the number in the book, ask "Information."

A "toll" or long distance call is one made to a place outside the local service area. In making a toll call ask the operator for "Long Distance."

Call your number with a slight pause between the hundreds and tens. For example, in calling "Barclay 1263" say: "Barclay One Two (pause) Six Three."

Speak clearly and distinctly, directly into the transmitter.



Listen to the operator's repetition of the number and acknowledge it.

Hold the line until your party answers and then give your whole attention to the telephone conversation. (Be sure to secure the name of the company and the person calling before giving any information.)

To recall the operator, move the receiver hook up and down slowly.

When you have finished talking, say "Good-bye" and replace the receiver on the hook.

Remember, courtesy over the telephone is always desirable. It wins friends for you and your company.

#### On All Incoming Calls

Answer your telephone promptly and pleasantly.

Announce your name and the name of your department, but do not say "Hello." (Use some such statement as this: "The Winston Company, Miss Maxwell speaking.")

Be ready with pad and pencil in order not to keep your caller waiting.

If you require help in handling the call properly, get it at once or politely transfer the call to the employee who can best handle it.

If you answer for another employee, offer to take the message, and then call it to the other's attention at the first opportunity.

Listen attentively, so that you will not have to annoy the caller by asking him to repeat.

Remember, abruptness or indifference drives away trade.

Maintain the same courtesy and consideration in a telephone conversation that you would with your customer face to face.

**Assignment 4.** Copy the foregoing suggestions with three carbons. Hand in your work.

**Assignment 5.** In case suitable equipment is available your teacher will make provision for practical work in telephoning.

#### PRINCIPAL RAILROADS IN THE UNITED STATES

Atchison, Topeka & Santa Fe  
Railway

Atlantic Coast Line Railroad

Baltimore & Ohio Railroad

Bessemer & Lake Eric Railroad

Boston & Maine Railroad

Buffalo, Rochester & Pittsburgh  
Railway

Canadian Pacific Railway

Central of Georgia Railway

Central Railroad of New Jersey

Central Vermont Railway

Chesapeake & Ohio Railway  
Chicago & Alton Railroad  
Chicago & Eastern Illinois Railroad  
Chicago & Northwestern Railway Co.  
Chicago, Burlington & Quincy Railroad Co.  
Chicago Great Western Railway Co.  
Chicago, Indianapolis & Louisville Railway  
Chicago, Lake Shore & Eastern Railway Co.  
Chicago, Milwaukee & St. Paul Railway Co.  
Chicago, Rock Island & Pacific Railway Co.  
Chicago, St. Paul, Minneapolis & Omaha Railway Co.  
Cincinnati, Hamilton & Dayton Railway  
Cleveland, Cincinnati, Chicago & St. Louis Railway  
Cumberland Valley Railroad  
  
Delaware & Hudson Co.  
Delaware, Lackawanna & Western Railroad  
Denver & Rio Grande Railroad Co.  
  
Erie Railroad  
  
Florida Central Railroad  
Florida East Coast Railway  
  
Grand Trunk Railway of Canada  
Great Northern Railway  
Hocking Valley Railway

Illinois Central Railroad  
Lake Shore & Michigan Southern Railway  
Lehigh Valley Railroad  
Louisville & Nashville Railroad  
Louisville, Henderson & St. Louis Railway  
  
Maine Central Railroad  
Michigan Central Railroad  
Minneapolis, St. Paul & Sault Ste. Marie Railway  
Missouri Pacific Railway Co.  
Missouri Southern Railroad Co.  
  
New York Central & Hudson River Railroad  
New York, New Haven & Hartford Railroad  
Norfolk & Western Railway  
Northern Central Railway  
Northern Pacific Railway  
Northwestern Pacific Railroad Co.  
  
Oregon Short Line Railroad Co.  
  
Pennsylvania Railroad  
Pere Marquette Railroad  
Philadelphia & Reading Railway  
Philadelphia, Baltimore & Washington Railroad  
Pittsburgh & Lake Erie Railroad  
Pittsburgh, Cincinnati, Chicago & St. Louis Railway  
  
St. Louis & San Francisco Railroad Co.  
St. Louis, Iron Mountain & Southern Railway Co.  
St. Louis, San Francisco & Texas Railway Co.  
Seaboard Air Line Railway

Southern Pacific Railway  
 Southern Railway  
 Texas & Pacific Railway Co.  
 Texas Central Railroad Co.

Union Pacific Railroad  
 Wabash Railroad  
 Western Maryland Railroad

**Assignment 6.** Copy the above list with two carbons and hand in.

### PAY ROLLS

The stenographer is sometimes called upon to make up a pay roll sheet from information furnished by the time-keeper or foreman. Such a sheet is shown below:

Pay Roll Sheet for Week Ending March 20, 1920

| No. | Name               | M | T  | W  | T  | F | S | Total Hours | Rate  | Amount   |
|-----|--------------------|---|----|----|----|---|---|-------------|-------|----------|
| 1.  | Albrecht, Oscar C. | 8 | 9  | 8½ | 10 | 9 | 8 | 52½         | \$.45 | \$23.63  |
| 2.  | Brennen, A. J.     | 8 | 8  | 8  | 8  | 8 | 4 | 44          | .45   | 19.80    |
| 3.  | Erdman, W.         | 8 | 8  | 9  | 7  | 8 | 4 | 44          | .40   | 17.60    |
| 4.  | Hersch, R. T.      | 8 | 8½ | 10 | 9  | 8 | 8 | 51½         | .35   | 18.03    |
| 5.  | Janowitz, C.       | 8 | 8  | 8  | 8  | 9 | 4 | 45          | .42   | 18.90    |
| 6.  | McMahon, L. S.     |   |    | 8  | 8  | 8 | 8 | 32          | .35   | 11.20    |
| 7.  | Publow, John       | 8 | 10 | 8½ | 8  | 8 | 8 | 50½         | .45   | 22.73    |
| 8.  | Renchan, Wm.       | 8 | 10 |    |    | 8 | 5 | 31          | .40   | 12.40    |
| 9.  | Schmulovitz, Otto  | 8 | 8  | 8  | 8  | 8 | 6 | 46          | .45   | 20.70    |
| 10. | Strasbaugh, F.     | 8 |    | 9  | 7  | 8 | 8 | 40          | .40   | 16.00    |
|     |                    |   |    |    |    |   |   |             |       | \$180.99 |

**Assignment 7.** Make a copy with carbon of this pay roll sheet on form 7. Insert at the top of the sheet the date of Saturday of the current week.

**Assignment 8.** The time-keeper has given you the following data for this week's pay roll. Arrange the names alphabetically and calculate the amount of each man's pay and the total; then make a copy with carbon of the pay roll on the remaining blank form in the budget. Check the figures carefully. Hand in both pay rolls with carbons for examination.

| Name               | M  | T  | W | T  | F  | S | Rate  |
|--------------------|----|----|---|----|----|---|-------|
| Weigman, Jas. R.   | 9  | 9  | 8 | 7  | 9  | 5 | \$.40 |
| Fitzhugh, Geo. H.  | 9½ | 8½ | 8 | 8  | 8  | 8 | .42   |
| Kreiger, A.        | 10 | 8  | 8 | 8  | 8  | 8 | .40   |
| Brandenberg, J. P. | 8  | 8½ | 8 | 9  | 10 | 8 | .45   |
| Karr, C. T.        | 8  | 8  | 8 | 8  | 8  | 5 | .40   |
| McKim, L.          | 8  | 8  | 8 | 8  | 8  | 8 | .45   |
| Goodwin, R. A.     | 8  | 9  | 8 | 10 | 9½ | 5 | .40   |
| Rodgers, B.        | 8  | 8  | 8 | 8  | 8  | 8 | .45   |
| Hartzell, Alex.    |    |    | 8 | 8  | 8  | 8 | .35   |
| Shanahan, W.       | 8  | 9  | 8 | 10 | 8  | 4 | .40   |

#### TRANSCRIBING

**Assignment 9.** The division freight agent will dictate five letters to you. Write these letters double space. Instead of dictating the addresses to these letters, the dictator will number the letters. The addresses you are to use are given below. Many dictators in large offices adopt this plan of indicating the addresses to the letters they dictate. The stenographer obtains the addresses from the correspondence handed to her.

1. Mr. R. W. Rice, Chief of Tariff Bureau, Pennsylvania Railroad Co., Pittsburgh, Pa.
2. Speer Construction Company, West Homestead, Pa.
3. Mr. W. T. Story, Division Superintendent Pittsburgh & Lake Erie Railroad, Wheeling, W. Va.
4. Mr. A. H. Nelson, Secretary, The Matthews Co., Zanesville, Ohio.
5. Mr. R. A. Welsh; D. F. A., Lake Shore & Michigan Southern Railroad, Detroit, Mich.

You should be able by this time to estimate fairly accurately the amount of typewriting space a letter will require. Before taking a letter from the machine, read it through carefully. If there are any typographical errors, they can be much more easily corrected while the sheet is in the machine.

#### FILING

In many railroad offices the *numerical* system of filing is used. The equipment for filing by this method is the same as in the alphabetical system except that figures instead of letters are printed on the tabs of the guides. The first guide is numbered 10, the second 20, the third 30, and so on as shown in illustration 8. The folders are arranged between the guides in numerical order.

In the numerical system each correspondent is given a file number, the numbers being assigned consecutively as files are opened. The name of the correspondent, his address, and the number assigned to him are entered on a card,

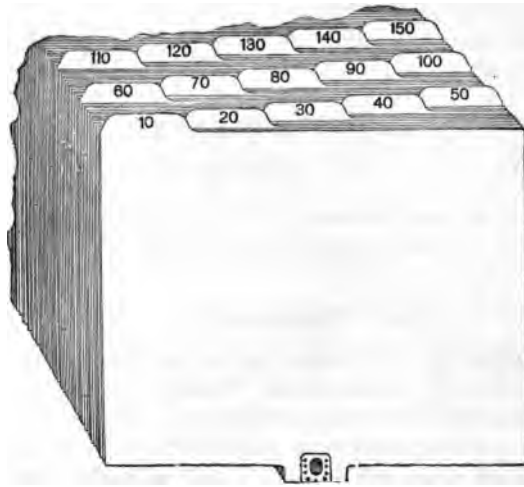


ILLUSTRATION 8—SIMPLE NUMERICAL SYSTEM FILE

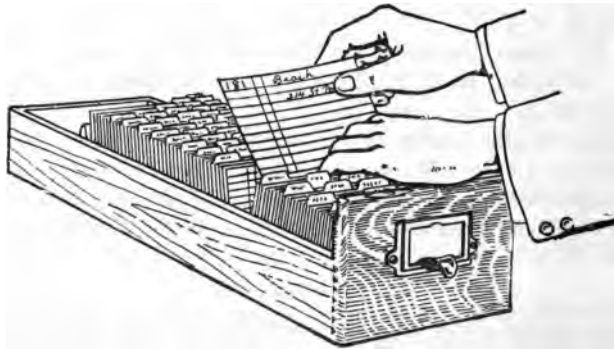


ILLUSTRATION 9—ALPHABETICAL CARD INDEX FOR NUMERICAL FILE

which is placed in a card index. The cards are filed *alphabetically* in the index. Illustration 9.) The name of the correspondent and his number are written on the folder in which the correspondence is placed. The folder is then filed numerically in the drawer.

The object in numerical filing is to bring together in one place all the correspondence relating to a particular subject or correspondent. For instance, the carbon of the style letter would be filed in the Elyria Manufacturing Company's file, even though the letter is addressed to our Division Freight Agent at Elyria. Mr. Babson might reply to our letter, in which case his reply would also be filed in the Elyria Manufacturing Company's file.

In finding the correspondence with this company, you would first look in the card index under E for the number assigned to the company. Should the number be 143, you would find this folder back of the 140 guide in the numerical file.

**Assignment 10.** The file numbers of the companies referred to in the letters you have written are as follows:

143—Elyria Manufacturing Company.

29—C. K. Ogden Company.

5—Pennsylvania Railroad Company. The subject of "P.R.R. Tariffs," a subdivision of our file with that company, has been assigned file #5-B.

48—Speer Construction Company.

94—National Steel & Iron Company.

57—The Matthews Company.

128—Cambridge Glass Company, Toledo, Ohio.

Make out cards for these companies; also a card for the P.R.R. Tariffs file file the cards alphabetically in the card index.

From the information on your cards prepare folders and file them in the proper places in the numerical file.

Write the file numbers on the carbon copies of the letters you have written and then file them. In getting correspondence from the files remember that you will first need to consult the card index.

#### SECRETARIAL PRACTICE

**Assignment 11.** You find that the mimeographs in use in the office are actually worn out. You decide to get complete information, including prices, about the various stencil duplicating machines on the market so that you will be in a position to make a recommendation to your chief for the purchase of new machines. After obtaining the information prepare a memorandum with your recommendation. Four machines will be needed. (Here is a test of your initiative. How will you go about getting printed information about these machines?)

ASSOCIATES  
EDWARD HAMMOND  
J. KEARSLEY KEARNEY  
C. A. DIFFENDERFFER  
GAYLORD BROOKS, JR.  
T. HAROLD YARD  
JOS. H. ST. MARTIN, JR.  
ALBERT H. BAKER

GAYLORD BROOKS & CO.  
REAL ESTATE  
20 E. LEXINGTON ST.  
BALTIMORE, MD.

TELEPHONES  
ST. PAUL 3234-3235

BOANS NEGOTIATED  
ON  
CITY & COUNTRY PROPERTY  
MEMBERS  
REAL ESTATE BOARD

Mr J B Kearney  
225 Munsey Building  
Baltimore Maryland

March 17  
1920

Dear Sir:

The following is the description requested in your letter of yesterday of the property at Guilford, which we are advertising for sale on an order of the Superior Court of Baltimore City.

The property is located on Chancery Road near Joslyn Lane. The lot is  $125 \times 215'$  and is improved by a brick and stucco dwelling; reception hall, parlor, library, dining room, kitchen, and pantry on the first floor; five bedrooms and two baths on the second floor; servants' quarters consisting of three rooms on the third floor. The house has all modern conveniences including gas, electricity, and hot water heat; hardwood floors throughout on the first and second floors; and tiled baths. There is a garage for two cars, with a cement driveway leading to Joslyn Lane. The price in fee is \$16,500.

The terms of the sale are one-third in cash, one-third in six months, and the remainder in twelve months; or all cash as the purchaser may prefer. The deferred payments, if any, are to bear interest from the date of sale and to be secured to the satisfaction of the trustees. The entire transaction is subject to ratification by the Superior Court of Baltimore City.

At the time and place of the sale the buyer will be required to pay on account 5% of the amount of the purchase; taxes, water rent, special paving taxes, rent, expenses, etc., to be adjusted to the day of sale.

The sale will take place at the salesroom of the Real Estate Board on Tuesday, March 23, at 2 P. M. I shall be pleased to show you the property at any time that suits your convenience.

Yours truly,

Gaylord Brooks & Co.

*Gaylord Brooks*  
President

GB  
OWJ

## REAL ESTATE SECTION

### TECHNICAL TERMS

- tract of title**—a short statement of the successive title deeds or other evidences of ownership of an estate, and of the encumbrances thereon.
- metting**—joining at a border or boundary (applied to property).
- curtenances**—rights or improvements belonging to a property.
- hitectural**—pertaining to the art of building. An *architect* is one who draws up the plans and specifications for a building.
- essment**—an official valuation of property for purposes of taxation. One appointed to make an assessment is called an *assessor*.
- igalow**—a house or cottage usually of one story.
- idemn**—to take private property for public purposes by due process of law, the owner being granted damages for the fair market value of his property.
- veyance**—the instrument by which property is transferred from one person to another; a deed. One who is engaged in the business of conveyancing is called a *conveyancer*.
- ed**—an instrument or document evidencing the transfer of title to real estate from one person to another.
- train**—to exercise the right which the landlord has to seize and to sell the personal property found on the premises leased to the tenant to satisfy his claim for rent that is due and unpaid according to the terms of the lease.
- plex**—a type of house construction which provides for two complete and separate suites of rooms in the one building.
- ement**—the right of the owner of one piece of land to use the land of another for a particular purpose.
- ctment**—the act of dispossessing or ousting.
- umbrance**—any charge upon property which diminishes the value of ownership or impairs its enjoyment; as, a mortgage or an easement.
- ction**—the act of expelling from property by legal process.
- cute**—to complete and validate by signing and sealing and making authentic.
- osure**—position with respect to the sun or points of the compass; as a southern *exposure*.
- simple**—a legal phrase meaning the unrestricted ownership of real estate.
- ntor**—the person who makes a conveyance. The one in whose favor a conveyance is made is called the *grantee*.
- und-rent**—the rent at which land is leased for building purposes.
- editaments**—any property which can be inherited.
- efensible**—not to be defeated, set aside, or made void.
- emnity**—compensation for loss, damage, or injury sustained.
- enture**—a deed or sealed instrument between two or more parties; a contract.



- lease**—a written instrument transferring the right to the use and possession of real property for a certain period of time for a consideration. The landlord is the *lessor* or *grantor*, and the tenant is the *lessee* or *grantee*.
- lien**—a legal claim or hold on property as security for a debt or charge. A *mechanic's lien* is a claim on buildings accorded by law to mechanics and material men for payment of wages and material supplied.
- parcel**—a distinct portion of land with definite boundaries.
- plat**—a map or plan showing portions of land laid off for some particular purpose; the land so laid off.
- realty**—landed property; real estate.
- recorder**—a public official whose duty it is to register deeds, mortgages, etc.
- sewerage**—the process or system of collecting refuse and removing it from dwellings by means of sewers or drains.
- site**—the ground on which anything is located.
- specifications**—the items or details of an estimate or plan for a building.
- sublet**—to let or rent to another person, the party letting being himself a *lessee* or tenant. The one to whom property is leased under such conditions is called the *subtenant* or *sublessee*; the party who sublets property is called the *sublessor*.
- suburban**—pertaining to the outlying parts of a city.
- survey**—to determine the boundaries, extent, and position of a parcel of land.
- tenant**—one who leases property from another, called the landlord.
- thoroughfare**—a public street, highway, or road.
- title insurance**—insurance which protects the purchaser against any claim brought against his title to the property covered by the policy.
- tract**—a certain piece or parcel of land.
- vendor**—legal term for “seller.” The *vendee* is the person to whom anything is sold.
- vested**—denoting the right of ownership already acquired by or existing in a certain person or persons.
- warranty deed**—a deed by which the one who executes a conveyance not only transfers his own title and interest in the property, but also makes certain guarantees (called *covenants*) concerning the title which he conveys.

## CORRESPONDENCE

1

Mr. Joseph C. Wilcox,  
 Pres., Forest Park B. & L. Assn.,<sup>1</sup>  
 2940 Garrison Avenue,  
 Baltimore, Md.

Dear Sir:

The mortgage for \$1950 on the property #1300 N. Burke Street, purchased by Henry C. Marlow and Ida C. Marlow, his wife, was executed yesterday and placed on record today.<sup>2</sup>

In the adjustment of expenses collected from Mr. Marlow the following items:

|                     |         |
|---------------------|---------|
| 1919 taxes          | \$25.83 |
| Accrued ground rent | 5.00    |
| Insurance           | 11.00   |
| Initiation fees     | 5.25    |

|       |         |
|-------|---------|
| Total | \$47.08 |
|-------|---------|

I enclose a check to the order of the Association in the above amount; so a check to your order<sup>3</sup> for \$1.50 covering the fees of the examining committee.<sup>3</sup>

Yours truly, (114)

2

Mr. J. Vincent Bushman,  
 765 Carroll Building,  
 Lynchburg, Va.

Dear Sir:

We have for sale at No. 4408 Rafton Street, just off Sycamore

Street, a twelve-room, center-hall, solid brick dwelling-house, having all conveniences, including two bathrooms; first and second floors are hardwood; the lot has a 57-ft.<sup>4</sup> frontage with a 108-ft. depth to Ridgewood Street.

There are two mortgages on the property: a first mortgage<sup>5</sup> of \$9000 at 5% and a second mortgage of \$2000 at 6%, which can either be extended or paid off.

We have a tentative<sup>100</sup> proposition of an exchange of equity in the above property for your residence at Beaver Street and McKee Place. It would seem that this property meets the requirements outlined in your letter of the 21st inst.

In case we are able to make the exchange for you, a commission of 2% on the price of your property will be due us.

Yours very truly, (167)

3

Real Estate Security Co.,  
 337 Greeley Street,  
 Vicksburg, Miss.<sup>6</sup>

Gentlemen:

In confirmation of our telephone conversation with your Mr. O'Neal, the Union Realty Company, owners of Guilford Manor, hereby authorizes your company to act as rental agents for these apartments.

<sup>1</sup> Building & Loan Association.

<sup>2</sup> Study carefully the definitions of *execute* and *record*.

<sup>3</sup> The committee of "viewers" of the building and loan association which inspects the property for the purpose of determining its value. Mortgages are usually placed for not more than two-thirds of the value of the property.

<sup>4</sup> Hyphenated because it is a compound adjective.

<sup>5</sup> A *first mortgage* is one that has priority as a lien over second and subsequent mortgages.

<sup>6</sup> The abbreviation of *Missouri* is *Mo.*

The Superintendent of the building, Mr. Gordon, is on duty from 8 A. M. to 5 P. M. He will be very glad to show visitors through the apartments at any time.

Your company will make the leases and collect the rents upon a commission of 5% on the amount of collections, settlements to the Union Realty Company to be made on or before the 25th of each month.

There are two prices for apartments—\$85 and \$100 a month. These prices cover heat, hot water, ice, gas for range, cold storage, in fact everything but light, which is metered, the tenant paying for the amount used. The apartments consists of seven rooms and bath. It is also possible to combine two apartments, making one complete so-called double apartment of fourteen rooms. The rental for such double apartments is \$200 a month.

A complete set of floor plans has been forwarded under another cover.

Yours very truly, (197)

4

Mr. W. J. Bacon,  
376 Meadow Street,  
Savannah, Ga.

Dear Sir:

The Fayette house about which you inquired in your letter of the 12th instant is located at 1864 Ocean Avenue, Fourteenth Ward, Savannah.

The house is located on the Maple Street car line, fifteen minutes' ride from the heart of the city and approxi-

mately twenty-five minutes' ride from Union Station. The Maple Street and Atlantic Avenue cars run in front of the house, while the Bennett Street and Oakmont cars are within three blocks of it. The property is thus within easy reach of four different car lines.

While this is a new district, it is now fairly well built up and established. All the streets in the district are being paved this year, and every street is sewerred. The community has good churches, schools, a fire-engine house, electric lights, and every convenience to be found in any other part of the city.

The house will rent readily at \$45 per month, and we believe that possibly it could be let for \$55. The total taxes are about \$78 a year. If you decide to visit the property, we suggest that you come directly to our city office, notifying us what day and hour you expect to be here, and the writer will be glad to show you over the property.

Yours truly, (225)

5

Mr. Carl K. Hughes,  
932 Wolcott St.,  
Troy, N. Y.

Dear Sir:

We have your letter of the 16th inst. regarding deed for your lot No. 450, Cedarcroft Plan. We shall execute the deed in your name, have it recorded, and send it to you as soon as the recorder returns it to us.

The contract for the Riverside Boulevard has been let, and work on

this improvement was | started on January 10. In addition, the city is now spending \$180,000 for widening and paving | West Tyler Avenue. The Rapid Transit Company is also installing new up-to-date cars on the Brookline line. As | <sup>100</sup> a result of these various improvements, we expect to see a decided advance in values in the Cedarcroft district within | the next year. Your lot at this time should be worth at least \$900. We believe, however, that | it will be worth several hundred dollars more in a year or two; consequently we advise you not to sell | it at this time.

We note your inquiry in regard to taxes. If you will write to the City Treasurer, | City Hall, Utica, N. Y., he will send you a statement of taxes which are due in January of next | <sup>200</sup> year. As to county taxes, the County Treasurer, Court House, Utica, will mail you upon request a statement of taxes | due in July of each year.

Very truly yours, (229)

6

Mr. R. S. Garfield,  
Lutherville, Md.

Dear Sir:

I have had another conversation with Mr. Albert on exchanging your farm property for his apartment building at | Lafayette and Dolphin Streets. These apartments have always paid a handsome profit on the investment, are in a first-class | location, and are occupied by a desirable class of tenants.

<sup>7</sup> Do not confuse this word with *reality*.

It is of course true that the transfer of apartment | buildings is ordinarily the result of an exchange, but I believe this is due to the amount of the investment, | which is usually quite heavy. There is no question that cash sales of properties involving investments of more than \$10,000 | <sup>100</sup> have been rather rare in recent years. I disagree with your statement, however, that apartments are generally erected | for trading purposes. As a matter of fact apartments are among the best income producers on the realty<sup>7</sup> market.

Farm | properties of the size of yours are difficult to handle. It is only when a broker is successful in interesting | a number of wealthy buyers in a particular location that cash sales of high-priced properties are possible.

I believe | that this particular exchange could be negotiated with a net profit to you of \$1900 annually, which would | <sup>200</sup> amount to practically 6% on \$32,000. I understand, of course, that you are not primarily | interested in an exchange proposition, but this plan offers you an opportunity to realize on the farm and make a | handsome profit at the same time. The apartments referred to are held by the original owners and are free of | all encumbrances.

I trust that you will give this matter serious consideration, since I feel that it offers a practical | solution of your problem.

Yours truly, (286)

Mr. C. K. Lawrence,  
487 Meyran Avenue,  
Jeffersonville, Ind.

Dear Sir:

Since the receipt of your letter of May 19, I have secured bids from several companies for painting | and roofing repairs. The painters and their bids are as follows:

|                         |                       |          |
|-------------------------|-----------------------|----------|
| Chas. F. Laramie & Bro. | Exterior and Interior | \$135.00 |
| H. J. Kirk & Co.        | Exterior              | 115.00   |
| H. J. Kirk & Co.        | Interior              | 15.00    |
| W. I. Lawson Co.        | Exterior              | 90.00    |
| W. I. Lawson Co.        | Interior Painting     | 10.00    |
| W. I. Lawson   Co.      | Interior Graining     | 28.00    |

Following the suggestion in your letter, I ascertained that the concern which did Mr. |<sup>100</sup> Fulsom's painting is no longer in business. You will notice that the bids vary slightly. All the contractors are reliable, | and we think will give you a first-class job. I found that the roof also needs some attention and | enclose a bid covering the needed repairs, submitted by the Scarborough & King Company.<sup>8</sup>

Before the painting is done, a | carpenter should be employed to repair the wood-work on different parts of the house, especially the window sashes, balusters, and | woodwork around the porches. Work of this kind is very difficult to bid on. When once tearing out is begun, |<sup>200</sup> worse conditions are likely to be encountered than are noticeable<sup>9</sup> on the surface. It is my opinion, however, that the | cost would not exceed \$50.

We have received the rentals for the last three months—March, April, and May. | We have also paid your city taxes for both the Fourth and Fourteenth Ward properties and last year's delinquent county | taxes. There is a small balance in your favor, but as the county taxes are due in July, I presume | that we had better retain it for that purpose.

Very truly yours, (292)

8  
Renwick Realty Co.,  
Dallas, Texas.  
Gentlemen:

Under and by virtue of the power and authority contained in the will of Marshall C. Evans, the under-

signed, | as trustees under said will, representing an undivided one-third interest, and the Colonial Trust Company, as agents of the | remaining two-thirds, will sell by private auction, on the premises, on Wednesday, the 23d day of April, at | 4

<sup>8</sup> Except in tabulations abbreviations should be used sparingly in the body of a letter.

<sup>9</sup> Words ending in *ce* or *ge* retain the *e* when the suffix *able* is added; *chargeable*, *peaceable*, *noticeable*.

o'clock P. M., all that valuable fee-simple property described as follows:

Nos. 12 and 14 West Read Street. | The lot has a frontage of 55 feet with a depth of 150 feet to the alley. |<sup>100</sup> This property is improved by a 3-story brick dwelling with side yard. The dwelling has onyx, marble, and hardwood | mantels<sup>10</sup> with mirrors, gas and electric light fixtures and side brackets, parquetry floors,<sup>11</sup> spacious cupboards, linen closets, and fine bathrooms | finished throughout in hardwood. There is a 2-story brick carriage house or garage in the rear.

Also No. 16 | West Read Street, adjoining the above property on the west, having a frontage of 28 feet and a depth | of 150 feet to the alley. This property is improved by a 3-story brick dwelling.

The two |<sup>200</sup> properties have a combined frontage on Read Street of 83 feet. They are well arranged and can easily be | converted into apartments. Apartments are much in demand in this section of the city.

The terms of the sale are: | one-third in cash, the balance in six or twelve months with interest and security, or all cash at the | option of the purchaser. A deposit of \$500 will be required at the time of the sale.

As | one of our prominent real estate operators, we believe you will

be interested in this sale, and invite you to |<sup>300</sup> attend.

Yours very truly, (304)

9

Mr. Stewart S. Janney,  
324 University Parkway,  
Berkeley, Calif.

Dear Mr. Janney:

In re Application 40869

Our completed examination of title to the two lots | of ground near Elmhurst, Alameda County, part of the former estate of Thomas D. Marshall, called "Mount Dillon," shows said | title as vested in Martha W. Marshall to be good and marketable in fee simple.

However, the description of the | lot containing 20 acres as given in the deed by which Martha W. Marshall acquired title is in such form | that we do not feel assured of its accuracy. This description<sup>12</sup> reads as follows:

"Beginning for the same at a |<sup>100</sup> stone 48 feet from the southwest corner of a barn intersecting a line run for a deed to the | Safe Deposit and Trust Company running east southeast 1113 feet to a line on Bernard N. Baker's | land; thence northeasterly with said line 850 feet opposite to a large poplar tree on the west side | of the road; thence west

<sup>10</sup> What is the distinction between *mantel* and *mantle*?

<sup>11</sup> Floors in which designs are worked with woods of different colors.

<sup>12</sup> In all deeds a description of the property conveyed is given.

northwest 1346 feet to a stone on a line of fence west | of the old homestead McDillon; thence 850 feet to the place of beginning.”

This description is somewhat ambiguous | <sup>200</sup> and apparently does not correspond with a plat of the Marshall estate on which are noted the various conveyances of | parts of the tract. The description we have of the 12-acre lot corresponds fairly well with the lines as | laid down on the said plat, but neither description discloses whether the 30-ft. right of way shown on the | plat is included. We therefore suggest the desirability of having a survey made of this property so as to have | an accurate description to insert in the deed to be drawn conveying the property to you.

Before preparing the deed | <sup>300</sup> we deemed it advisable to suggest the survey. If you do not wish it, we shall proceed at once to | prepare the deed, although we could not guarantee that the description as given in the deed corresponds with the lines | of possession unless the survey is made.

Yours very truly, (350)

10

Mr. Harry W. Kent,  
1746 Charles Street,  
Cumberland, Md.

Dear Sir:

We thank you for your inquiry of the 14th inst. in regard to farms we have for sale.

A 277-acre farm located twelve miles from the Baltimore city line has just been placed with | us. It is well equipped and in a high state of cultivation. All but 25 acres are cleared. The | land lies<sup>13</sup> nicely and is well drained. Alfalfa, mixed hay, rape, rye, wheat, and corn crops have already been put | out. There is a 4-acre orchard in all kinds of fruit, and a 2-acre garden has already been | <sup>100</sup> planted in many kinds of vegetables and berries. The fields are well divided and all are fenced. The improvements consist | of a large mansion house having spacious porches and containing sixteen rooms, three baths, and servants' quarters, set in a | 5-acre lawn adorned with beautiful shade trees and imported shrubbery; a large garage and stable; a double bank barn; | a gardener's house; a farm manager's house; and two small tenant houses.<sup>14</sup> The price of this farm is \$17,500. |

We also recommend for purchase the White Hall Stock Farm, located about two miles from Chestertown on | <sup>200</sup> the road to Hanesville. This farm consists of 307 acres, of which 265 are under | cultivation and 35 in meadow, branch, and woodland. It is a productive grass, alfalfa, and fruit farm, and has | about 2500 bearing pear and apple trees. It is particularly well adapted to stock raising and dairy farming. | It has a 36 x 13'<sup>15</sup> silo. There are two large horse and cow barns; corn cribs

<sup>13</sup> Do you know how to use the various forms of the verbs *lie* and *lay* correctly?

<sup>14</sup> Observe carefully the punctuation of this sentence.

<sup>15</sup> The sign ' is sometimes used for foot and feet. Inch or inches is represented by ".

on | and implement sheds; poultry, sheep, and hog houses; a dairy; an engine house. The farm is a well-built |<sup>300</sup> eight-room building with three porches. It is bounded by a large yard and fine trees. A stone deposit | in the | lot will supply ample stone for foundation and cellar walls for additional buildings. There is also a | | suitable location for a cannery or milk house on the Pennsylvania Railroad, which runs through one corner of the | | . | A quick purchaser can buy this farm for \$15,000 on easy terms, | session June 1.

If either of | these farms appears to meet your requirements, we shall be very glad to show them to you.

Yours very truly, | (400)

### 11

C. W. Copeland,  
Pres., Harmon Development Co.,  
Buffalo, N. Y.

Sir:

I am forwarding to you photographs and maps of the South Hills | viewed by the officials of | company when they were in | burgh last week. The principal | s I wish to impress upon you in | d | to the advantages of this | ion are the following:

There is hardly a main thorough- | in any suburb of Pittsburgh | has not advanced anywhere from | to 500% per foot front within | last ten | years. This is the | ral result of the growth of the |

Pittsburgh has been developed | veral miles to |<sup>100</sup> the east, north,

and west, but toward the south | natural development was impossible. Just across the Monongahela River from the | business center of Pittsburgh stands a great barrier—Mt. Washington. Until ten years ago there was no development in that | beautiful district back of Mt. Washington. It was all farm land. In 1904 the street railway tunnel, 3600' | long, was completed through Mt. Washington, which brought this desirable section within a few minutes' run from the | business district.

Since that time more than 5000 homes have been built and magnificent schools and churches of every |<sup>200</sup> denomination have been built. Millions of dollars have been spent in improvements, paved streets, sewers, filtered water, natural gas, electric | lights, etc., so that now this section contains every modern convenience. There are many more new buildings under way in | the South Hills today than in any other section of the city. This great development has brought about the absolute | necessity for a main traffic and automobile highway from the heart of the city through the South Hills.

The three | municipalities interested in providing this highway realized that West Liberty Avenue was the only available direct route; consequently Allegheny County |<sup>300</sup> has already completed a fine system of macadamized and brick paved roads leading south from West Liberty Avenue at Delmont | and radiating to all parts of southern Allegheny County.



The borough of Dormont has already widened and paved West Liberty Avenue from these roads through the borough to the city line. The city of Pittsburgh has passed the required legislation and has condemned and purchased the necessary property to widen and pave the avenue to a 70-foot boulevard from the city line to the Bell House, where it will connect with the great traffic tunnel which will be built directly through Mt. Washington to the heart of Pittsburgh's business district.

It is on this main street in the very center of this great development that the tract in question lies. It is an ideal spot for the operations you contemplate. It gives you the lowest taxes in the county, only 11.5 mills, and you will receive as high rents as anywhere in the Pittsburgh district, while possibilities for increase in land values are not paralleled in any other city in the country.

Yours very truly, (489)

12

we have recently listed one of the best investment properties in this city which we believe will meet your requirements the property is located at the northeast corner of Jackson and Monroe streets in the twenty-third ward the lot has a frontage of

26½ feet and a depth of 128 feet to the alley it is improved by a 4-story brick building on the first floor there are three store-rooms suitable for retail business purposes one facing Jackson street and the other two facing Monroe street all having large front plate glass display windows on the second floor there are four suites of offices suitable for doctors lawyers or dentists one of the rooms in the rear suites has a skylight and could be rented to a photographer on each of the third and fourth floors there are two apartments of five rooms each excellently finished and decorated the building is steam heated by coal or gas fired boiler and has an instantaneous hot water heater there is an 8 x 10 elevator which serves all offices and apartments this property is available for purchase on an unusually favorable basis because it is a part of an estate the affairs of which must be wound up to comply with a recent court order there is an outstanding mortgage of \$8000 that can be continued the property is offered for sale at \$17,500 it seems to be exactly the type of investment property for which you are in the market we can show you over the premises at any time and shall be pleased to supply any further details you may desire if you are interested yours very truly

## OFFICE TRAINING ASSIGNMENTS

Your teacher is the manager of Gaylord Brooks & Co., Baltimore, Md., for whom you are working in this section.

## TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

## ARRANGEMENT

The style letter is written with "hanging indentations." The first line of each paragraph begins flush with the margin, while the remaining lines are begun five spaces from that margin. Note the absence of punctuation marks in the address. In some offices stenographers are instructed to omit the punctuation marks from the address in order to save the time required to write them. This is purely a matter of individual preference. In writing the letters in this section you may omit the punctuation marks in the addresses. Write all the letters in this section in the form of the style letter.

**Assignment 1.** Make a copy of the style letter with carbon on form 8.

**Assignment 2.** Copy letter 6 with carbon on a letterhead. Submit both letters for approval.

## ABSTRACT OF TITLE

**Assignment 3.** On plain paper make a copy with two carbons of the abstract of title shown on form 9. Detach the form from the budget. Use double space throughout and draw a line (on the typewriter) at the end as shown, on which the manager will sign. Submit for approval.

## LEASE

**Assignment 4.** Form 10 shows a lease which has been filled out in longhand by the manager. Detach it from the budget and read it through carefully. Prepare final forms of this lease in duplicate by filling in the blank leases (marked form 11) on the typewriter. Make use of the variable spacer on your machine so that your writing will be on the dotted lines. Leases are drawn in duplicate so that each party may have a copy. Submit for approval.

## MORTGAGE

**Assignment 5.** On plain paper make a copy with carbon of the mortgage deed given on form 12. Draw lines on the typewriter for the signature. Copy also the affidavit of the notary public. Present for approval.

## REAL ESTATE LIST

**Assignment 6.** Make a copy with two carbons of the description of the following properties which we have on our list at the present time.

- \$11,000.00 3632 Carlisle Ave., 8 rooms, stone, range, bath, gas, electric light, stationary tubs, furnace, lot 50 x 80, mortgage \$3,000.
- 11,500.00 1421 Allendale Road, 10 rooms, brick, range, bath, gas, stationary tubs, lot 50 x 120, mortgage \$4,500.
- 11,500.00 7429 Monticello St., 9 rooms, brick, range, bath, gas, electric light, stationary tubs, furnace, lot 50 x 93.
- 11,500.00 1213 Elsinor Ave., 9 rooms, brick, range, bath, gas, lot 65 x 100, mortgage \$4,000.
- 12,000.00 3406 Fairview Ave., 8 rooms, brick, range, bath, gas, electric light, stationary tubs, furnace, lot 50 x 130, mortgage \$2,000.
- 12,000.00 2721 Linden Ave., 11 rooms, brick, range, bath, gas, electric light, stationary tubs, furnace, lot 40 x 137, mortgage \$3,000.

## SECRETARIAL PRACTICE

**Assignment 7.** The manager wishes to send a copy of this list to each of the three prospective purchasers whose names are given below. He asks you to compose a brief letter calling attention to the list you are enclosing and stating that these properties appear to meet the client's requirements as outlined to us. Express your willingness to show the client over the property at his convenience. Present the letters with the enclosures for signature.

Mr. C. R. Moulton, 411 N. Eutaw Street.

Mr. R. A. Pritchard, 1614 W. North Avenue.

Mr. Frank Tyler, 1417 Cathedral Street.

## PUNCTUATION AND PARAGRAPHING

**Assignment 8.** Letter 12 is a letter we are sending out at the present time in an endeavor to interest prospective buyers in an investment property placed in our hands. Determine upon the punctuation and paragraphing and write the letter with carbon to the following:

Mr. T. A. Sullivan, 432 W. Lexington St.

Mr. A. W. Ward, 516 Garrett Bldg.

## TRANSCRIBING

**Assignment 9.** The manager will dictate to you five letters from our regular correspondence. Transcribe them in the form of the style letter. He will number the letters, omitting the addresses which you will supply from the following:

1. Mr. L. T. Crawford, 942 N. Calvert St., Baltimore, Md.
2. Mr. Richard D. Hopkins, President, United States Fidelity Co., Philadelphia, Pa.
3. Mr. Philip S. Barrett, R. F. D. #2, Baltimore County, Md.
4. Mr. T. L. Davies, Sparrows Point, Md.
5. Mr. T. W. Fletcher, 1012 Equitable Bldg., Baltimore, Md.

## FILING

When the volume of correspondence to be filed by the alphabetical method is large, the alphabet is divided into 40, 80, 120, or even more parts. Thus, instead of one index guide for A there might be three designated respectively, Aa-A1, Am-Ar, and As-Ay. The folder containing the correspondence with Mr. Philip S. Atkinson, for example, would be placed back of the As-Ay guide.

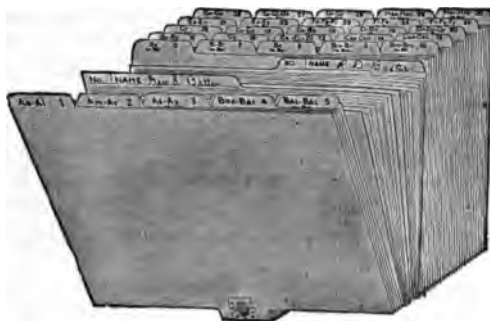


ILLUSTRATION 10—GUIDES FOR DIVIDING ALPHABET INTO PARTS

**Assignment 10.** Prepare folders for the correspondents to whom you have written. Place the folders in the proper subdivisions of an alphabetical file. File the correspondence.

# Burdick, Brooks & Co.

## INVESTMENT BROKERS

60 BROADWAY

NEW YORK

January 14

1 9 2 0

R. S. BURDICK, President  
BEWELL BROOKS, Vice-President  
EDWIN A. ROLAND, Secretary-Treasurer

Members New York Stock Exchange  
Members American Branches Association  
Members U. S. Chamber of Commerce

Mr L. F. Gayler  
1262 Milton Street  
Birmingham Alabama

Dear Sir:

Mr. Burdick has asked me to reply to your letter of the 12th.

The Consolidated Electric & Power Company of Macon has shown continuous and substantial increases in earnings for the past five years. Recently the growth of business in its territory has resulted in particularly noticeable increases. For the three months ending December 31, 1919, the results of its operations were as follows:

|                                 |                  |
|---------------------------------|------------------|
| Gross Earnings                  | \$210,745.86     |
| Operating Expenses and Taxes    | <u>45,353.81</u> |
| Net Earnings                    | 165,392.05       |
| Bond Charges                    | <u>68,311.70</u> |
| Net Income                      | 97,080.35        |
| Preferred Dividend Requirements | <u>36,000.00</u> |
| Net Credit to Surplus           | \$ 61,080.35     |

The bond interest has been earned two and a half times, while the preferred stock dividend has been earned more than two and two-thirds times. Due to exceptional conditions resulting principally from foreign liquidation, the securities of this company, although they have enjoyed a noteworthy advance in the past few months, are selling at prices considerably below their income earning value.

The First Mortgage Bonds can be obtained at a price to yield about 5%, and the Cumulative Preferred Stock, on which 6% dividends have been paid uninterruptedly since 1912, can be purchased at a price to yield nearly 9%.

We enclose a pamphlet which describes these securities in considerable detail.

Yours very truly,

BURDICK, BROOKS & COMPANY  
*Bewell Brooks*  
Vice-President

BB-KJR

Enc

## BANKING AND INVESTMENT SECTION

### TECHNICAL TERMS

- bet mortgage**—a mortgage given to secure various items of indebtedness previously existing, or to cover numerous items and various forms of property.
- er**—a dealer in stocks, bonds, and securities.
- ion**—gold or silver in the mass before being coined into money.
- loans**—money borrowed on collateral<sup>1</sup> to be paid back when demanded by the lender. Money to lend on this basis is “call money.”
- elation**—the act of annulling or making void by payment, or other means of settlement. Cancellation of an outstanding bond takes place when the company redeems it, or buys it back.
- tialization**—the total amount of authorized capital stock of a corporation.
- ring-house**—a place or institution where the settlement of mutual claims held by banks against each other is effected by the payment of differences called *balances*.
- mitments**—orders entrusted to a broker.
- proller** (spelled also controller)—an officer who has certain duties to perform in examining the accounts of a corporation, a state, or a city government. The *comptroller of the currency* administers the laws relating to national banks.
- ertibility**—the capability of being turned into money of similar amount at any time.
- espondent bank**—a bank which acts as the agent of another bank in a distant city in making collections and transacting business for it.
- tersign**—to sign opposite another signature by way of verifying the first signature and the document to which it is attached.
- ulative dividend**—a dividend with regard to which it is agreed that if at any time it is not paid in full the difference shall be added to the following payment. Thus, if a cumulative dividend is 5% and only 4% is paid, the amount due at the next payment will be 6%.
- enture**—a certificate of indebtedness of a corporation in the form of a promissory note, issued in a form convenient to be bought and sold as an investment.
- nitive**—the final or permanent form of bond as distinguished from the interim or temporary form issued to purchasers until the definitive form is available.
- ositary**—a person entrusted with valuables for safe-keeping. *Depository* is the term preferred to designate a place of storage as applied to banks, trust companies, bonded warehouses, etc. A *depositor* is one who deposits money in a bank.

<sup>1</sup> See definition of *collateral security* on page 3

- drawee**—a person on whom a draft is drawn. The *drawer* is the person who draws the draft. The *payee* is the person in whose favor the draft is drawn.
- endorsement** (or **indorsement**)—the signature of the payee of a check, note, or draft, or that of a third person on the back of the paper in evidence of his transfer of it, or of his assuring its payment, or both.
- Federal Reserve Bank Act**—an Act of Congress passed December 23, 1913, establishing twelve regional banks in different parts of the country, and providing for the issuance of a new Federal Reserve currency; the gradual retirement of the old national bank currency; the rediscounting for national banks and other banks that are members of the system of commercial paper discounted by them; and the creation and development of a Federal Reserve Board for more effective supervision of all national banks.
- fiduciary**—having the nature of a trust, especially a financial trust. A trust company is said to act in a *fiduciary capacity* because the relation between it and the client is one of trust and confidence.
- franchise**—a privilege of a public nature conferred on individuals by grant from the government; as, the right of a street railway company to lay its tracks on the streets.
- funded debt**—indebtedness in the form of bonds bearing interest at a fixed rate.
- income tax**—a tax levied on incomes above a specified limit. Legalized in the United States by the Sixteenth Amendment to the Constitution.
- irredeemable**—that which cannot or need not be made good by payment. The government regards portions of less than one-half of a piece of paper money as *irredeemable*.
- liquidation**—the act of winding up the affairs of a corporation or company by settling with its debtors and creditors, disposing of its assets, and apportioning the amount of each shareholder or partner's interest in the remaining assets.
- memorandum of deposit**—a statement in writing evidencing the deposit of a certain sum of money in a bank.<sup>2</sup>
- non-assessable**—a term applied to a security upon which the owner may not be legally called upon for additional payments in the case of failure of the business or for any other reason.
- non-fluctuating**—a term applied to securities whose market price does not rise and fall.
- par**—the value of a share of stock that is selling neither at a discount nor at a premium; the face value.
- preferred stock**—shares of stock on which dividends are payable before those on the common stock.
- premium**—that part of the price of a security over and above its par value. A stock at \$100 par with a market value of \$106 is selling at a *premium* of \$6.

<sup>2</sup> Refer to the example of a *certificate of deposit* on page 162.

- protest**—a certification by a notary public that payment of a draft or note has been refused at maturity.
- quick assets (or liquid assets)**—cash or property that can be quickly converted into cash, such as merchandise, notes receivable, accounts receivable, etc.
- receiver**—a person appointed by a court to take over the management or disposal of property in controversy, pending litigation or final settlement.
- redemption**—the act of redeeming or paying off an indebtedness.
- serial**—arranged or issued in a series; as *serial bonds*.
- sinking fund**—a portion of the undivided profits retained for the purpose of redeeming an indebtedness, or for providing against probable losses.
- specie**—coin; metallic money.
- speculative**—a term applied to stocks and bonds which offer chances for large profits, but whose security is regarded as questionable.
- stock certificate**—a written, printed, or engraved paper representing a specified number of shares of stock in a corporation or company.
- Stock Exchange**—a place where brokers transact their business of buying and selling securities.
- subsidiary**—a company owned by or under the control of another corporation or company.
- syndicate**—an association of persons or corporations formed for the purpose of promoting some particular enterprise.
- tax-exempt**—a term applied to stocks, bonds, etc., which by the terms of the law are not liable to taxation.
- teller**—an employe in a bank whose business it is to receive or pay money over the counter.

## CORRESPONDENCE

1

Mr. W. C. Joy,  
1422 West Park Ave.,  
Willimantic, Conn.

Dear Sir:

On January 16 we wrote you that non-residents of the State of New York could carry bank | balances or deposit their securities in New York City, either temporarily or permanently, with the assurance that they would not | be subject to the

state inheritance tax.<sup>3</sup> The legislature has just passed a bill making such balances and securities subject | to the tax.

The new law now in force provides that intangible property, defined by law as "incorporeal property, including | money, bank deposits, shares of stock, bonds,<sup>4</sup> notes, evidences of interest in property, and evidences of debt," held in New |<sup>100</sup> York State by bona fide non-resident

<sup>3</sup> A tax assessed on estates disposed of by will.

<sup>4</sup> Bonds are certificates of ownership of a specified portion of a capital debt owed by a government, corporation, or company, and usually bear a fixed rate of interest.



decedents,<sup>5</sup> is subject to the inheritance tax established by law the same as though such property were held by residents of the state. We have prepared a booklet containing the text of the new law together with explanatory notes, a copy of which we have sent you under another cover.

This bank has complete facilities for handling active and reserve accounts and for the safe-keeping of securities. We cordially invite your business and, notwithstanding the change in the law, we hope you will avail yourself of our service.

Yours truly, (198)

2

Farmers & Drovers National Bank,  
New Orleans, La.

Gentlemen:

This is in answer to your letter of the 25th ultimo.<sup>7</sup>

Call loans to brokers are generally made against a diversified list of securities consisting of approximately 50% rails and 50% industrials.<sup>8</sup> While we prefer to have our call loans collateralized in this way, we do not hesitate to accept single issues of listed<sup>9</sup> dividend

paying railroad stocks or bonds if the borrower is of high standing.

For your information, Messrs. Sullivan & Hayes have been on our books for a number of years, and the collateral securing their loan of \$100,000, which we are holding for you (Oregon Shortline Railroad's 4's 1942)<sup>10</sup> as no doubt you know, is listed on the New York Stock Exchange and has a fair market. These bonds were assumed by the Denver & Rio Grande Railroad Company. The present relatively low quotation<sup>11</sup> of 68 to 70 is due principally to the readjustment in the value of railroad securities.

We assume it is your desire to have this loan credited to your account, and we have accordingly taken it over for ourselves. We assure you of our pleasure in serving you in transactions of this kind.

Yours very truly, (206)

3

Mr. George A. Walters,  
1437 S. Washington Street,  
Vincennes, Ind.

Dear Sir:

In further reference to your letter of January 24, we have now se-

<sup>5</sup> *Bona fide non-resident decedents* means deceased persons who actually did not reside in the State of New York.

<sup>6</sup> Active bank accounts are accounts subject to check. *Reserve accounts*, such as savings deposits, may not be drawn against until after the lapse of a certain time or upon notification to the bank that a withdrawal is to be made.

<sup>7</sup> Last month, abbreviated ult. Proximo (abbreviated prox.) means next month, and instant (inst.) this month.

<sup>8</sup> That is, stock or bond issues of railroads and manufacturing enterprises.

<sup>9</sup> Stocks are said to be *listed* when they are traded on the Stock Exchange.

<sup>10</sup> This indicates that these bonds draw interest at the rate of 4% per annum and become due in 1942.

<sup>11</sup> Refer to the stock quotations given on the financial page of a newspaper.

an issue which we believe meets your requirements. We  
 Light & Traction First Lien Bonds of 1942, at 93½ and interest.

These bonds are of the class that narrow market,<sup>13</sup> but could be liquidated if necessary in a reasonable time. They are therefore suitable in respect for conservative investment, which does not deny the quick convertibility of stocks and bonds.

As to security, they are a first lien, by deposit of all first mortgage bonds,<sup>14</sup> on all the property of companies that earn about 2½% the interest on the bonds. They have additional security in the form of stock deposited as collateral. Details are fully explained in enclosed circular.

The high earning capacity and the fact that these bonds commend themselves as being admirably suited for the needs of the investment you have in mind. They will very likely increase in value as time goes on. If you are interested you will be pleased to receive such additional facts and details as you may desire to have.

Yours truly, (208)

4

Mr. William H. James,  
 214 Third National Bank Bldg.,  
 Kansas City, Mo.

Dear Sir:

We acknowledge receipt of yours of the 22d instant enclosing your note<sup>15</sup> for \$18,000, dated September 24, payable six months after date, with collateral as listed. As the securities offered are quite satisfactory, in accordance with your request we have placed the amount of the note to the credit of the Interstate National Bank, Kansas City, as deposited by you, and enclose a memorandum of deposit.

We return herewith the following certificates of Mississippi Steel Company stock for endorsement, which you omitted to endorse after the stock had been assigned to you by your brother.

Certificate No. 8024 for 500 shares  
 " " 3034 " 1000 "

Kindly endorse the stock, have the signature witnessed, and return the certificate to us. In this connection, inasmuch as you have expressly put us on notice that the certificates are the property of your brother, our attorneys advise us that we should obtain from him a

<sup>13</sup>In quoting prices of stocks it is customary to omit the dollar sign.

<sup>14</sup>That is, the opportunities for selling are comparatively few.

<sup>15</sup>First mortgage bonds represent indebtedness secured by a first mortgage on tangible property of the issuer or company issuing the bonds.

Refer to the illustration of a note on page 162.

letter addressed to us setting forth that he has assigned the stock to you for the purpose of permitting you to place it with us as collateral on the above note. Will you kindly have him write us a letter to this effect?

Yours very truly, (213)

5

Mr. Henry J. Jenkins,  
Cashier, Boise National Bank,  
Boise, Idaho.

Dear Sir:

Your letter of the 5th instant enclosing drafts<sup>16</sup> aggregating \$17,254.29 is received. This amount has been placed to your credit under separate notification.

In accordance with your instructions, these drafts are being forwarded payable "net cash thirty days from date of draft unless shipment arrives prior thereto, in which case payment shall be made within three business days thereafter." We have also noted that the draft of Montgomery & Company on Folsom, King & Company, New York, \$7,395.75, is to be held for the arrival of the goods if the drawee so desires.

All items are being forwarded "no protest"<sup>17</sup> and subject to discount as specified. As requested, we are instructing banks in case of non-payment to inform you direct by wire. Of course your idea is to receive such notice as promptly as pos-

sible. The ordinary procedure, ever, would be for our correspondent banks to wire to us and we in would wire you. We should course notify you immediately, it occurs to us that the latter method has some advantages, since it allows us to keep in closer touch with items and thereby give you better service. It will be our purpose facilitate the handling of this business as much as possible and to cooperate with you in every way.

Very truly yours, (242)

6

Mr. C. L. Adams,  
Treas., Hudson Furniture Co.  
Waterbury, Conn.

Dear Sir:

You have on several occasions sent us drafts for collection and consequently be interested in certain rules which we have just put in effect.

A large proportion of the drafts received at this point for collection are drawn "with exchange and collection charges," while the part to whom these drafts are drawn most invariably refuse to pay such charges. We have thus been forced to return thousands of unpaid drafts at our own expense, thereby incurring a loss aggregating hundreds of dollars each year.

This condition has compelled us to adopt the following rules regarding collections, to which we shall

<sup>16</sup> See the example of a draft on page 163.

<sup>17</sup> That is, the drafts are not to be protested if they are not accepted and paid.

strictly adhere after this date. We feel that business houses that do not carry their accounts with us cannot reasonably expect us to serve them in collecting their past-due accounts at a loss to ourselves, or without just compensation for our services.

Rule 1. On all items whether drawn "with exchange" or "with exchange and collection charges" or not, a collection charge for each hundred dollars or fraction thereof will be made and deducted from the remittance.

Rule 2. On items returned unpaid for any cause whatever, a charge of 25¢ will be made<sup>19</sup> to cover the cost of recording, presenting, postage, etc.

Rule 3. Items sent for acceptance and return must be accompanied by a fee of 25¢ for services, stationery,<sup>18</sup> postage, etc.

We extend to you our facilities subject to the above rules, and shall give our best attention to any collections you may send us.

Yours very truly, (259)

7

Montgomery & Company,  
Tribune Building,  
Chicago, Ill.

Gentlemen:

We have just been appointed one of the financial agents to market the new \$20,000,000 issue of the

General Motors Corporation 6% Cumulative Debenture Stock. Complete details of the issue are not yet available, but we can give you the following information:

The par is 100 and the price will be 90 flat, callable at 115 and accrued dividend.<sup>19</sup> Interim certificates,<sup>20</sup> bearing interest at 6% from May 1 to August 1 next, will be deliverable against sales and will be exchangeable for definitive engraved certificates after July 15, when the books close.<sup>100</sup>

This stock is preferred equally with the preferred stock of the corporation as to assets and dividends, and is superior as to voting rights and redemption price. It is safeguarded by liberal preferences and in the event of default in payment on a dividend thereon continuing for six months, it has sole voting power to the exclusion of the preferred and common stock.

The net quick assets of the corporation as of December 31 amounted to \$150,390,000. The annual net income applicable to interest on these debentures, before the deduction<sup>200</sup> of federal income and excess profits taxes, averaged \$16,626,000 for the last two calendar years,<sup>21</sup> or fourteen times the maximum interest requirements on this issue.

All legal matters in connection with the issue are being passed

<sup>18</sup> What does the word *stationery* mean?

<sup>19</sup> That is, such dividend as may have been earned up to the time of selling.

<sup>20</sup> See the definition of *definitive* on page 109.

<sup>21</sup> The calendar year is from January to December as distinguished from the *fiscal year* (defined on p. 129)

upon by Messrs. Simpson, Thatcher, & Bartlett, attorneys at law, New York. The balance sheet and income account<sup>22</sup> of the corporation for last year have been certified by Messrs. Haskins & Sells, certified public accountants.

We will forward additional information as soon as we are in possession of it.

Yours very truly, (295)

8

Mr. Clark Delaney,  
Pres., Colonial National Bank,  
Richmond, Va.

Dear Mr. Delaney:

As a stockholder in the Fidelity Securities Corporation of North Carolina, you are hereby notified that the Fidelity Securities Corporation of Virginia has been incorporated for the purpose of acquiring the property, assets, rights, and privileges of the first named corporation. The purchase price is based upon an appraised value as of May 1, and if the negotiations are consummated the transaction will become effective on that date.

It is proposed that the new corporation shall issue 25,000 shares of stock at a par value of \$50, or \$1,250,000, to be sold at \$60 per share, thus providing a working surplus. The stock is to be issued without a stated rate of dividend, the purpose being to declare dividends consistent with its earnings. It is intended that the management of

the new corporation shall be the same as that of the present corporation. While the holders of the majority of the stock are desirous of accepting this proposition and under the charter are authorized to do so, nevertheless the management desires that each and every stockholder shall be given full opportunity of joining in the new company, and that each be given the privilege of changing his holdings in the old company for stock of the new company.

A committee of the board of directors, consisting of William B. Baer, John P. Baker, and J. C. Wilson, was appointed to appraise the company's net assets, which were found to be of a value of \$1,380,260.67, which after allowing par, or \$10 per share, for the preferred stock, amounting to \$1,252,145, will leave \$128,115.67 applicable to the common stock, or \$2.21 per share.

We request that you inform us by return mail whether it is your desire to surrender your stock in the old company for shares in the new company.

Yours very truly, (354)

9

Mr. C. A. Shelton,  
41 Wall Street,  
New York City.

Dear Sir:

After carefully considering the information you gave Mr. Roland,

<sup>22</sup> See the illustration of a trading and profit and loss statement on page 143.

The "majority" of the stock is more than 50% of that issued.

commend for investment the  
ing offerings of bonds: |

City of San Francisco 4½%  
Bonds

Kentucky Electric Company  
First Mortgage 5% Bonds |

Montana Power Company First  
Mortgage 6% Bonds

The City of San Francisco  
s are a legal investment for |

savings banks in most of the  
England States and in New

State, the banking laws of the |  
having the most rigid require-

s of any state in the union. We  
the bonds at 95 to |<sup>100</sup> yield

6. This is a high-grade mul-  
til investment.

The Kentucky Electric Com-  
First | Mortgage 5% Bonds

1 denominations of \$100, \$500,  
1000. The | price is 95 and in-

, yielding 5.50%. This com-  
has been in successful opera-

| for about four years and has  
1 a constant increase in its

erty and earning power. The  
s are well | secured by property

value in excess of the bonded  
and the earnings are about

times the |<sup>300</sup> annual interest  
es. This company supplies the

of Louisville with electric cur-  
In our judgment its bonds

pecially | attractive.

The Montana Power Company  
Mortgage 6% Bonds are in

inations of \$100, \$500, | and  
. The price is 105 and in-  
yielding 5.85%. | The mort-

gage securing this issue includes the  
usual restrictions as to additional

issues of bonds and provision for the |  
creation of a liberal sinking fund.

The net earnings of the property  
are now about double the interest

charges and |<sup>300</sup> will undoubtedly be  
materially augmented<sup>24</sup> upon the com-

pletion of improvements under con-  
struction, without any increase in the

fixed charges, as | bonds for these  
improvements are included in the

amount now outstanding.

Our list of holdings comprises  
about 150 | different issues, but

we have selected the bonds most  
likely to meet your requirements.

We await your reply with interest |  
and shall be glad to go into the mat-  
ter further with you.

Yours very truly, (375)

10

First National Bank,

Tulsa, Okla.

Gentlemen:

Attention of Mr. J. Y. Davis,

Assistant Cashier

We have your letter of the 17th  
instant in which you | request in-

formation regarding the Detroit Ma-  
chine Company and the Troy Manu-

facturing Company, and ask for  
market quotations on their common |

and preferred stock. The Detroit  
Machine Company went out of ex-

istence in 1908, when its business  
was taken over | by the Michigan

Machine Company. The Troy Manu-  
facturing Company has been in

<sup>1</sup> Increased

existence since 1903 and is now a subsidiary of the Michigan Machine Company. The stocks of both companies are listed and traded on our local exchange.

The <sup>100</sup> Michigan Machine Company has two issues, \$7,000,000 preferred and \$13,000,000 common. The preferred is 7% cumulative, and on December 15 last 41½% was in arrears.<sup>25</sup> Last year 37½% was paid on account of back dividends. It is traded in at the rate of seven hundred to two thousand shares per month. Last year the high was 155, and the low 116.<sup>26</sup> Yesterday it sold at 121½. The common pays a dividend of 4½%<sup>200</sup> and is traded in to the extent of from three thousand to thirty thousand shares per month. The high for last year was 66, and the low 34½, sales yesterday being at 59.

The Troy Manufacturing Company has two issues, \$1,000,000 preferred and \$4,000,000 common. In 1908 all of the common was exchanged for common of the Detroit Machine Company, but few dividends have been paid on this stock and they have never exceeded 4% per annum. There is no market for it. The <sup>300</sup> records show that the preferred sells from one hundred to five hundred shares per month. The high last year was 106½, and the low 97½. It pays semi-annual dividends at the rate of 7% per annum.

We enclose a memorandum of our local exchange securities, on pages 6 and 7 of which you will find reports on these corporations. If we can supply further information we shall be pleased to serve you.

Yours very truly, (387)

11

To the Depositors of the State Bank of Govans:

The undersigned committee has formulated a plan for the liquidation of the State Bank of Govans and the prompt payment of its liabilities, a copy of which is enclosed. Summarized this plan contemplates:

1. That the Union National Bank of Baltimore shall take over all of the liquid assets of the State Bank, and that the remaining assets shall be transferred to a Liquidating Committee to consist of five persons, two selected by the Depositors' Committee, two by the Stockholders' Committee, and the fifth chosen by the four members thus appointed.<sup>100</sup>

2. That the Union Bank shall immediately credit to the depositors upon its books, subject to check, 85% of their deposit claims; the remaining 15% of such claims to be represented by Depositors' Certificates, bearing interest at the rate of 3% per annum, issued by the Liquidating Committee.

3. That the stockholders of the State Bank shall provide a fund of \$200,000, to be paid over by the Stockholders' Committee to the

<sup>25</sup> See the definition of *cumulative dividend* on page 109.

<sup>26</sup> That is, the highest quotation during the year was \$155 and the lowest \$116.

National Bank, in part con-  
 sion of its assuming payment of  
 f the deposit |<sup>300</sup> claims.

That as soon as the Union  
 shall have realized out of the  
 and moneys so transferred |  
 sum sufficient to pay in full the  
 f the deposit liabilities assumed  
 t, with interest, any remaining  
 shall be retransferred to the  
 ating Committee.

That the assets in the pos-  
 | of the Liquidating Com-  
 , after payment is made of the  
 t of the deposit liabilities  
 ed by the Union Bank, | shall  
 lied: (a) to the payment of the  
 tors' Certificates, representing  
 aining 15% of their deposit |<sup>300</sup>  
 , with interest; (b) to the pay-  
 of the amounts subscribed and  
 y the stockholders, with in-  
 and (c) | the remainder, to  
 ckholders upon their shares of

e recommend the acceptance  
 plan because it provides | for  
 yment of deposit claims much  
 ickly than could be hoped for  
 the most favorable liquidation  
 e bank's assets by a receiver,  
 liquidation by a receiver, re-  
 ; as it does prompt realization  
 e assets, | would involve a  
 e of assets intrinsically valu-  
 hich under this plan is avoided.  
 ease notify your committee  
 iately of |<sup>400</sup> your acceptance or  
 n of this plan on the form  
 d. (411)

12

in reply to your letter of . . . . . the  
 los angeles street railway corporation  
 is one of the most successful public  
 service corporations in the united  
 states the first and refunding mort-  
 gage 5% bonds<sup>27</sup> of this company  
 are among the soundest and most  
 attractive public service bonds on the  
 market we shall not attempt to  
 repeat the details of this offering  
 since they are completely covered in  
 the enclosed circular but a few facts  
 are worthy of reiteration this cor-  
 poration furnishes city and suburban  
 rapid transit facilities without compe-  
 tition to a business field of nearly  
 half a million people comprising what  
 is undoubtedly the most rapidly  
 developing section of the united  
 states its bonds are secured by a  
 closed mortgage which provides a  
 sinking fund that will retire two-  
 fifths of the issue before maturity  
 the net earnings for last year were  
 about twice the bond interest and the  
 surplus over interest charges was  
 approximately \$1,000,000 in that  
 period the gross earnings increased  
 \$350,031 or 5.6% the net earnings  
 \$90,886 or 4.8% and the surplus over  
 all interest charges \$69,722 or 10.3%  
 a record made possible by efficient  
 management and the rapid develop-  
 ment of the community we offer  
 these bonds subject to prior sale and  
 advance in price at 97 and interest  
 to yield 5.20% and unqualifiedly  
 recommend them to you for invest-  
 ment yours very truly

Such bonds are secured by a first mortgage and at the same time replace a previous issue or issues  
 falling due.



## OFFICE TRAINING ASSIGNMENTS

In this section you are in the employ of Burdick, Brooks & Co., New York City. Your teacher is assistant to the president.

## TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

## ARRANGEMENT

Study the arrangement of the style letter. Each line, except the tabular matter, begins flush with the margin of the letter. Notice the position of initials of the dictator and the stenographer. Use this form in all the correspondence of this section.

**Assignment 1.** Copy the style letter with carbon on form 13. Use the current date and your teacher's initials and your own as usual. Be particularly careful in copying the tabulation.

**Assignment 2.** Copy letter 9 with carbon on a letterhead. Present both letters for approval.

## BANK STATEMENTS

Bank statements provide excellent material for practice on figures. Great care must be exercised in the copying since figures are very easily transposed in typewriting.

**Assignment 3.** Below is shown a short form of bank statement. Make a copy of it without carbon. Check your work carefully.

## Statement of Condition

American Exchange National Bank of St. Louis, Mo.

At the Close of Business June 30, 1919

## Resources

|  |                        |
|--|------------------------|
| Loans, Discounts, and Investments . . . . .            | \$26,309,261.13        |
| U. S. Bonds and Certificates of Indebtedness . . . . . | 11,107,897.76          |
| Banking House . . . . .                                | 400,000.00             |
| Lot adjoining Banking House . . . . .                  | 15,000.00              |
| Due from Banks . . . . .                               | 5,152,680.70           |
| Customers' Liability Account of Acceptances . . . . .  | 1,080,000.00           |
| Exchanges for Clearing House . . . . .                 | 2,418,114.98           |
| Cash and Reserve . . . . .                             | <u>12,256,821.83</u>   |
|  | <b>\$58,739,776.40</b> |

| Liabilities   |                 |
|---|-----------------|
| Capital . . . . .   | \$2,500,000.00  |
| Surplus and Profits . . . . .   | 2,124,649.81    |
| Circulation . . . . .   | 1,184,500.00    |
| Dividend No. 208 . . . . .  | 212,500.00      |
| Acceptances executed for Customers . . . . .                                  | 1,080,000.00    |
| Bills Payable other than Federal Reserve Bank                                 | 3,400,000.00    |
| Bills Payable Federal Reserve Bank, Secured<br>by U. S. Obligations . . . . . | 7,043,875.00    |
| Deposits (net) . . . . .  | 41,194,251.59   |
|   | <hr/>           |
|   | \$58,739,776.40 |

**Assignment 4.** Copy the statement given below.

The National Bank of Baltimore  
Statement of Condition  
Close of Business, December 31, 1919

| Resources   |                 |
|---|-----------------|
| Loans and Discounts . . . . .                             | \$8,904,773.25  |
| Customers' Liability Account                              |                 |
| Acceptances . . . . .                                     | 100,000.00      |
| Baltimore City Stock . . . . .                            | 691,872.50      |
| U. S. Bonds to Secure Circu-<br>lation . . . . .          | 290,000.00      |
| U. S. Bonds and Certificates of<br>Indebtedness . . . . . | 7,912,615.27    |
| Stock of Federal Reserve Bank                             | 51,350.00       |
| Stocks and Bonds . . . . .                                | 1,615,297.21    |
| Banking House, Furniture, and<br>Fixtures . . . . .       | 389,653.61      |
| Other Real Estate . . . . .                               | 12,139.64       |
| Interest Earned not Collected . . . . .                   | 71,188.09       |
| Cash and Sight Exchange . . . . .                         | 3,020,914.29    |
|   | <hr/>           |
|   | \$23,059,803.86 |

## Liabilities

|   |                |                 |
|---|----------------|-----------------|
| Capital . . . . .   | \$1,210,700.00 |                 |
| Surplus . . . . .   | 500,000.00     |                 |
| Undivided Profits . . . . .   | 100,442.10     |                 |
| Discount Collected not Earned . . . . .                               | 61,213.15      |                 |
| Reserve for Taxes . . . . .   | 33,000.00      |                 |
| Reserve for Interest . . . . .  | 34,500.00      |                 |
| Reserve for Depreciation of Bank-<br>ing House and Fixtures . . . . . | 14,653.61      |                 |
| Circulation . . . . .   | 290,000.00     |                 |
| Deposits . . . . .  | 16,815,295.00  |                 |
| Bills Payable Federal Reserve<br>Bank . . . . .                       | 3,900,000.00   |                 |
| Acceptances Executed for Cus-<br>tomers . . . . .                     | 100,000.00     |                 |
|   |                | \$23,059,803.86 |

**Assignment 5.** Copy the following statement. Present the three statements for approval.

The National Exchange Bank, Los Angeles, Calif.  
Statement of Condition June 30, 1919

## Resources

|  |                 |
|--|-----------------|
| Loans and Discounts . . . . .                          | \$10,343,220.04 |
| Overdrafts, secured and unsecured . . . . .            | 214.76          |
| U. S. Bonds to secure Circulation . . . . .            | 856,000.00      |
| U. S. Bonds and Certificates of Indebtedness . . . . . | 2,985,600.00    |
| Other Bonds and Securities . . . . .                   | 797,653.32      |
| Stock of Federal Reserve Bank . . . . .                | 70,500.00       |
| U. S. Bonds Loaned . . . . .                           | 90,500.00       |
| Banking House and Improvement Account . . . . .        | 281,345.50      |
| Due from Banks and Bankers . . . . .                   | 932,883.76      |
| Checks and other cash items . . . . .                  | 50,748.56       |
| Exchanges for Clearing House . . . . .                 | 3,128,388.35    |
| Cash in Vault . . . . .                                | 390,901.99      |
| Due from Federal Reserve Bank . . . . .                | 1,444,118.79    |
| Due from U. S. Treasurer . . . . .                     | 42,800.00       |

|   |                 |
|---|-----------------|
| Interest Earned but not collected . . . . .                               | 23,913.74       |
| Customers' Liability under Letters of Credit<br>and Acceptances . . . . . | 941,643.78      |
|   | <hr/>           |
|   | \$22,380,432.59 |

Liabilities

|  |                 |
|--|-----------------|
| Capital . . . . .                                    | \$1,500,000.00  |
| Surplus . . . . .                                    | 850,000.00      |
| Undivided Profits . . . . .                          | 238,069.14      |
| Unearned Discount . . . . .                          | 66,011.48       |
| Amount Reserved for Interest Accrued . . . . .       | 7,416.62        |
| Dividends unpaid . . . . .                           | 61,387.69       |
| Circulation . . . . .                                | 845,097.50      |
| Deposits, Banks                                      | \$2,454,845.51  |
| "    Individuals                                     | 11,228,688.84   |
| "    U. S. . . . .                                   | 816,372.03      |
|  | <hr/>           |
|  | 14,499,906.38   |
| U. S. Bonds Borrowed . . . . .                       | 90,500.00       |
| Letters of Credit and Acceptances . . . . .          | 941,643.78      |
| Bills Payable (Acct. U. S. Cfts. of Indebtedness)    | 2,284,000.00    |
| Customers' Liberty Loan Notes Rediscounted . . . . . | 896,400.00      |
| Rediscounts Acct. Commercial Paper . . . . .         | 100,000.00      |
|  | <hr/>           |
|  | \$22,380,432.59 |

FORM OF PROXY

When a stockholder wishes to designate some one to vote his stock at a stockholders' meeting he draws up a "Proxy," similar to the form given below:

PROXY

now all Men by These Presents:

That I, ....., do hereby make, constitute and appoint ..... my true and lawful attorney, for me and in my name, place and stead, to vote upon the stock owned by me and standing in my name upon the books of the Carbon Steel Company at special meeting to be held on the .. day of ....., 19.., at eleven o'clock A.M., at the office of the Company, foot of Thirty-second Street, in the City of Pittsburgh, State of Pennsylvania, or any adjournment

thereof, in the matter of a plan to be submitted to the Board of Directors for transferring all the assets and business of the Company to a corporation of the same name organized under the laws of the Commonwealth of Pennsylvania, and such other matters as may properly come before the meeting, hereby ratifying and confirming all that my said attorney shall do lawfully in the premises.

Witness my hand and seal this..... day of....., 19..

(Seal)

Witness:

**Assignment 6.** Read the form through carefully. Mr. Burdick, who owns stock in the Carbon Steel Company, wishes to designate his assistant (your teacher) as his proxy. Write the form, with carbon, filling in the two names in the proper blanks. The meeting will be held a week from today. Hand in for signature.

#### ALPHABETIZING—CITIES AND TOWNS

The names of many of the cities and towns given below are frequently misspelled by stenographers. At least one city in each state is included. The list therefore contains the official abbreviations for the names of all the states as recommended by the Post Office Department. Observe that Idaho, Iowa, and Ohio should never be abbreviated.

|                      |                    |                   |
|----------------------|--------------------|-------------------|
| Wheeling, W. Va.     | Boise, Idaho.      | Eau Claire, Wis.  |
| Savannah, Ga.        | Wooster, Ohio.     | Tacoma, Wash.     |
| Anniston, Ala.       | Meridian, Miss.    | Washington, D. C. |
| Denison, Tex.        | Annapolis, Md.     | Lincoln, Nebr.    |
| Sumter, S. C.        | Pocatello, Idaho   | Somerville, Mass. |
| Montclair, N. J.     | Butte, Mont.       | Laconia, N. H.    |
| Cheyenne, Wyo.       | Minneapolis, Minn. | Phoenix, Ark.     |
| Keokuk, Iowa.        | Astoria, Ore.      | Terre Haute, Ind. |
| Fond du Lac, Wis.    | Lorain, Ohio.      | Dubuque, Iowa.    |
| Durham, N. C.        | Worcester, Mass.   | Cincinnati, Ohio. |
| Charlottesville, Va. | Newburgh, N. Y.    | Tucson, Ariz.     |
| Sioux Falls, S. Dak. | Binghamton, N. Y.  | Wilmington, Del.  |
| Berkeley, Calif.     | Stamford, Conn.    | Shreveport, La.   |
| Provo, Utah.         | Schenectady, N. Y. | Pueblo, Colo.     |
| Albuquerque, N. Mex. | Baton Rouge, La.   | Frankfort, Ky.    |
| Des Moines, Iowa     | Lewiston, Me.      | Hannibal, Mo.     |

|                   |                    |                    |
|-------------------|--------------------|--------------------|
| naconda, Mont.    | Tallahassee, Fla.  | Bismarck, N. Dak   |
| McAlester, Okla.  | Ypsilanti, Mich.   | Reno, Nev.         |
| Woonsocket, R. I. | Chattanooga, Tenn. | Gloucester, Mass.  |
| Wichison, Kans.   | Streator, Ill.     | Duquesne, Pa.      |
| Montpelier, Vt.   | Vincennes, Ind.    | Oklahoma, Okla.    |
| Warehills, Mass.  | Wilkes Barre, Pa.  | Sacramento, Calif. |

**Assignment 7.** Arrange the names of these cities and towns in exact alphabetical order; then make a copy of the entire list without carbon, writing the abbreviation for the state after the name of the city or town.

**Assignment 8.** Arrange the names of the *states* alphabetically. Make a copy of the list, writing the name of each state in full followed by the official abbreviation. Hand in both lists.

#### REFERENCE BOOKS

In every well equipped business office there will be found certain reference books with the use of which you should be familiar. A knowledge of *how* and *where* to get information that is wanted is one of the marks of a competent stenographer.

#### THE DICTIONARY

Words constitute the material with which you work. The stenographer needs, more than any one else, to acquire the "dictionary habit." Few people make full use of the information which an unabridged dictionary contains. Some of the things you can learn from the dictionary about words are:

##### Spelling

In the case of a noun whose plural is formed irregularly, the spelling of the plural will be given.

The spelling of the past tense and present and past participles of irregular verbs will be given.

##### Pronunciation

##### Definition

##### Part of Speech

##### Syllabication

In case you are in doubt as to how to divide a word at the end of a line refer to the dictionary. Remember that words should be divided only between syllables.

##### Hyphenating

Many dictionaries contain also appendices, such as lists of synonyms and antonyms, a glossary of foreign words and phrases, abbreviations etc.

From the *telephone directory* you can learn not only the names and telephone numbers of the subscribers but their addresses as well. The *classified business directory* included in most telephone directories is often of value. In the *city directory* will be found the names, addresses, and occupations of residents of the city. The *Official Postal Guide* gives a list of all the post offices in the United States. An *Atlas* may be consulted for lists of railroads, electric, and steamship lines. The counties, cities, and towns of each state with their population are also given.

Familiarity with and an intelligent use of the helps provided in reference books will afford numerous opportunities for the exercise of initiative in your work.

**Assignment 9.** Consult an unabridged dictionary in the preparation of the following exercises.

1. Write the present participle of the verbs  
lie                    die                    dye                    regret                    prefer
2. Write the past participle of  
bear                    break                    forget                    lie                    lay
3. Write the plurals of the nouns  
embargo                    erratum                    radius                    alumna                    attorney  
zero                    motto                    cargo                    appendix                    notary
4. Ascertain the correct pronunciation of  
ally                    apparatus                    indictment                    parol  
applicable                    isolate                    attacked                    admirable  
genuine                    comparable                    indisputable                    casualty  
exquisite                    inquiry                    address                    illustrate  
formidable                    simultaneous                    alternate                    coupon

By reference to your local telephone directory find the names, addresses, and telephone numbers of (a) two notaries public, (b) one electrical supply house, and (c) two stationery stores.

#### PUNCTUATION AND PARAGRAPHING

**Assignment 10.** Letter 12 is one which we send out regularly in reply to inquiries in connection with the investment security mentioned. Write the letter with carbon to the following:

Mr. C. W. Hoyt, 749 King Street, Sumter, S. C. Mr. Hoyt wrote us five days ago.

Mr. Frank W. Simpson, 1741 Colorado Street, Minneapolis, Minn. Mr. Simpson wrote us three days ago.

#### TRANSCRIBING

**Assignment 11.** Five letters in the banking and investment business will be dictated to you for transcription.

## FILING

Many large banks and banking houses that have considerable out-of-town correspondence use the *geographical* system of filing. The equipment necessary in geographical filing is a set of guide cards with center tabs on which are printed the names of the states. These guides are arranged alphabetically in the drawer. Very often a set of alphabetical guides is placed back of each state index to facilitate the filing of correspondence.

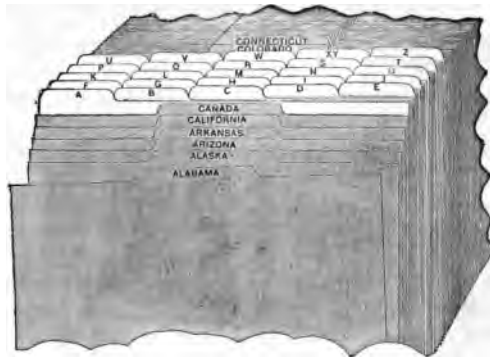


ILLUSTRATION 11—STATE GUIDES FOR GEOGRAPHICAL FILE

In filing the correspondence of the First National Bank, Billings, Montana, for instance, you would locate the index guide for Montana and place the folder containing the correspondence back of the “B” guide. The correspondence of all firms located in towns beginning with the letter “B” should be arranged in alphabetical order within the subdivision.

**Assignment 12.** Make out folders for the letters you have written and file the correspondence in the geographical file.

## SECRETARIAL PRACTICE

**Assignment 13.** Your chief: “I wish you would get for me a complete list of all the banks in \_\_\_\_\_ (your own town or city). Find out if they are national, state, or private banks. I’d like to get copies of their last annual statements, too. You can make a memorandum of the data you get and put it on my desk.”



**RODWAY, BURCHARD & KESSLER**  
**CERTIFIED PUBLIC ACCOUNTANTS AND AUDITORS**

LA SALLE BUILDING, CHICAGO, ILL.

April  
Twelfth  
Nineteen  
Twenty

L. M. RODWAY  
R. C. BURCHARD  
J. G. KESSLER

OFFICES  
CHICAGO  
NEW YORK  
PITTSBURGH

Illinois Wagon Works,  
458 N. Beaver St.,  
Champaign, Ill.

Gentlemen:

In accordance with your appointment, we have made an examination of your cash account as of March 1, 1920, and have found an apparent shortage of \$2755.50, full details of which are shown in the enclosed report containing the following schedules:

- Schedule 1 - Reconciliation of cash as of March 1, 1920, resulting in the above shortage.
- Schedule 2 - Reconciliation of check-book entries, cancelled checks, bank pass-books, bank statements, and cash-book entries.
- Schedule 3 - Copy of cash statement dated March 25, 1920, found in your former bookkeeper's desk and apparently made up by him before his discharge.
- Schedule 4 - A list of so-called cash tickets, petty cash payments, and I. O. U.'s found in the same place.
- Schedule 5 - A list of items that we could not identify.
- Schedule 6 - Reconciliation of the amounts of Schedule 1 with those on the other schedules, resulting in a difference or shortage of \$2755.50.

As stated in Schedule 1, a number of cash receipts from March 25 to April 1 have not been entered in the cash book. These items should be entered without delay, all entries posted to the proper ledger accounts, and a trial balance taken. After the accounting has been brought up to date, we recommend that a complete detailed audit be made at once, as our brief examination of the books shows them to be in bad shape.

Yours very truly,

RODWAY, BURCHARD & KESSLER

*P. H. Martindale*  
Assistant Manager, Chicago Office

PFM-EMcC

Enc.

## ACCOUNTING AND INCOME TAX SECTION

### TECHNICAL TERMS

- abatement**—the amount, quantity, or sum by which anything is reduced; a deduction or refund.
- aggregate**—a total or gross amount; a combined whole considered with reference to its parts.
- administration expense**—the expense incurred in the general management and administration of a business considered as a whole.
- amortization**—the extinction of a debt by regular payments, or an annual charging off of a certain amount of an expense or the cost of an investment for a period of years.
- analysis sheet**—a paper used for the purpose of separating and classifying the various items appearing in an account.
- antedate**—to give an earlier date than the true one; the opposite of *postdate*.
- apportion**—to divide and assign in just proportion; as, to apportion expenses.
- appreciation**—an increase in value.
- auditor**—a person appointed or authorized to examine and verify accounts and records.
- burden**—manufacturing expenses. The three elements in the cost of any article are materials, labor, and manufacturing expenses. Such expenses are frequently called factory expenses or “burden.”
- capital stock**—the amount of stock at its par value authorized by the charter or certificate of incorporation of a company. *Paid-in* capital is the amount paid by the stockholders on the subscribed shares of capital stock.
- computation**—the act of calculating; the amount reckoned.
- contra**—used to refer to the opposite side of an account.
- corporate**—pertaining to a corporation; as, *corporate debts*
- covenant**—an agreement or contract under seal.
- creditor**—one who gives credit in business transactions to another called the *debtor*.
- debit**—to charge to or to charge with.
- deductible**—capable of being taken off or deducted.
- default**—to fail in fulfilling or satisfying an engagement, claim, or obligation.
- deficit**—deficiency in amount; the excess of losses over profits.
- depreciation**—the material decline in the value of property due to use, wear and tear, and the passage of time.
- discrepancy**—a difference or disagreement between accounts, etc.
- fiscal year**—any yearly period regardless of the calendar year, at the end of which the financial condition of a business is determined and the books closed.

- gross profit**—the profit computed before any expenses are deducted. The *gross profit* less expenses gives the *net profit*.
- inventory**—a statement or schedule of merchandise on hand or in stock.
- liabilities**—the total amount of indebtedness; amounts owed by a person, firm, or corporation.
- minutes**—the record of the official acts and transactions of the board of directors or stockholders of a corporation.
- overhead expenses**—expenses incurred in the administrative department of a concern, but chargeable to cost of production over and above factory expenses or burden.
- petty cash**—a fund kept on hand to pay small and incidental expense items.
- posting**—the act of transferring debit and credit items from books of original entry to the accounts in the ledger.
- prime cost**—the sum of the material and labor costs of a product.
- proceeds**—the sum derived from the sale of anything.
- production factor**—any process, machine, or group of like machines used as a means of production or manufacture.
- prorate**—to distribute proportionately.
- protectograph**—a machine which stamps or impresses the amount of a check, draft, etc., in the paper to make alteration impossible.
- recapitulation**—a summary.
- reconciliation**—the establishment of the agreement between or proof of two or more calculations.
- reimbursement**—the act of repaying.
- resources**—anything of value belonging to a person, firm, or corporation; assets.
- revenue**—the annual rents, profits, interest, or income of any kind of property, or of a business or government or political subdivision thereof.
- segregate**—to set apart for a special purpose.
- surtax**—a graduated tax assessed by the Federal Income Tax Law on incomes in excess of certain graduated amounts, in addition to the regular or normal tax.
- tangible**—capable of being realized on; as *tangible security*.
- treasury stock**—stock of a corporation previously issued to stockholders which has been secured from them by purchase or donation to be sold again to secure working capital.
- turnover**—the amount of stock or goods sold in any given period of time; the cost of such goods.
- valuation**—an estimate of value or worth; as a *valuation* of accounts for the purpose of taxation.
- verification**—the act of proving to be true or correct.
- voucher**—a receipt or other written evidence of the payment of money. A *voucher* check is one to which is attached a statement of the items which it pays.

## CORRESPONDENCE .

## 1

INTER-OFFICE COMMUNICATION<sup>1</sup>  
 Attention of Financial Department  
 Auditing Department  
 Accounting Department

Effective at once, all final payments collected from consumers and employees<sup>2</sup> in connection with their stock subscriptions will be included | in the daily report of the teller<sup>3</sup> at this office, along with such other items as savings fund and employees' | stock subscription payments, etc., and will be part of the company's regular daily deposit.

In order that the Auditing Department | may check the amount to be shown on the daily reports, the duplicate of the final payment ticket will be | signed each morning by the writer or Mr. Black and delivered to the Auditing Department, together with other tickets representing | <sup>100</sup> savings fund and similar collections. After establishing the agreement of the total of these final payment tickets with the amount | shown on the daily report, the Auditing Department will deliver the tickets to the Accounting Department for entry in consumers' | and employees' accounts.

The Financial Department, which has heretofore used the dupli-

cate ticket for the purposes of its records, will | hereafter receive the triplicate ticket. In order to be sure that all such triplicate<sup>4</sup> tickets are returned to him, Mr. | Green will check them against his stock delivery book upon receipt.

By order of (194)

## 2

Mr. C. B. Calvin,  
 Oriental Steamship Co.,  
 San Francisco, Calif.

Dear Sir:

Your letter February 27<sup>5</sup>

The regulation of the Treasury Department with respect to the method of ascertaining | the taxable income of foreign steamship companies whose steamships touch at American ports and which carry therefrom freight and passengers | for hire follows:

The returns made by such corporations should include as gross income the total receipts of all outgoing | business, whether freight or passenger. With the gross income thus ascertained, the ratio existing between it and the gross income | from all ports, both within and without the United States, should be determined as the basis upon which allowable deductions | <sup>100</sup> may be computed.

<sup>1</sup> A letter or memorandum from one office of a company to another office of the same company.

<sup>2</sup> This word is properly spelled either *employe* or *employee*. Both forms are used in this book.

<sup>3</sup> See definition on page 111.

<sup>4</sup> Defined on page 78.

<sup>5</sup> Note the different ways throughout the book in which reference is made to previous correspondence.

The principle<sup>6</sup> to be observed is that allowable deductions shall be computed upon a basis which recognizes that the income arising and accruing from business done in and from this country shall bear its share of expense incident to the earning of such income, in the ratio that the gross income arising in and from this country bears to the entire gross income arising from business done both within and without this country. In other words the net income of a foreign steamship company doing business in or from this country, for the purpose of the income tax assessable and payable to the United States, shall be ascertained by deducting from the gross receipts from 'outgoing business such a portion of the aggregate expenses and losses as such receipts bear to the aggregate receipts from all ports, except that the interest deduction, after being likewise apportioned, shall be subject to the limitation fixed by law in the case of foreign corporations transacting business or having capital invested in this country.

I shall be with you on March 2 to prepare your return.

Yours very truly, (288)

3

The Lone Star Oil Refining Co.,  
Dallas, Texas.

Gentlemen:

The department is in receipt of your communication of the first in-

stant in which you explain that your company, having been unable to pay any interest on its bonded indebtedness for some years, proposes to cancel that indebtedness by paying part of it in new securities and part in cash, the creditors agreeing to a reduction of \$100,000 in the face of the bonds as an inducement for the raising of \$100,000 in cash.

In response to your inquiry as to whether such a compromise of indebtedness is taxable as income, you are informed that while in fact the earnings of your corporation are in no wise increased by this compromise the liabilities are reduced, and to that extent your corporation gains in its net worth. By this compromise the financial condition of your company is improved by \$100,000, not through any earnings, but by a settlement with its creditors under which \$200,000 of its bonds are canceled at a cost to it of \$100,000 in cash, or at fifty cents on the dollar.

In cases somewhat similar to this, in which the creditor has forgiven the debt of the debtor, this office has consistently held that the amount of the debt forgiven constitutes income. In this particular case, in the opinion of this office, the difference between the amount realized by your corporation when the bonds were sold and the amount which it will be required to pay upon their final redemption constitutes

<sup>6</sup> Do you know the distinction between *principal* and *principle* so well that you will always use the proper word?

taxable income. This income may be prorated over the period elapsing between the date of the bond issue and the date of redemption, and that portion of the income apportioned to each year shall be returned as taxable income for <sup>300</sup> the year in which the bonds are redeemed.

Yours very truly, (311)

4

Mr. A. G. Moreland, Western Sales  
Manager

Mr. R. W. Jessup, Eastern Sales  
Manager

Mr. C. W. Huff, Canadian Sales  
Manager

In order to conform more nearly to approved methods of accounting and also to reduce to a minimum the amount of the company's funds required to meet ordinary petty cash disbursements in district offices, it has been decided that no payments shall be made out of such funds for supplies or other purposes for which bills can be received, approved, and passed to the accounting department at the general office for payment. This will include such items as rent, taxes, commissions, subscriptions for publications, dues, telegraph and telephone bills, fees, stationery and printing, etc.,<sup>7</sup> in excess of ten dollars.

District <sup>100</sup> office petty cash funds are carried primarily for the conveni-

ence of the district offices in caring for office payrolls, advances to salesmen for traveling expenses, and miscellaneous disbursements. The use of these funds for temporary cash advances to employes<sup>8</sup> except in cases of sickness or death, or the cashing of checks, is to be discouraged. Checks, drafts, and notes are not to be deposited in this fund, and you will understand that you are not authorized to sign, endorse,<sup>9</sup> or deposit for collection checks, notes, or other negotiable paper in the name of or for the account of the company.<sup>100</sup>

Pass books<sup>10</sup> must be submitted to the bank to be balanced on the first day of each month, and the amount of the balance is to be reported promptly to the general office. A uniform petty cash check form will be adopted, the use of which will be confined solely to checking on district office funds. A protectograph will be furnished to be used on all such checks.

At present the district bank account is carried in the name of the district sales manager. We propose within a short time to have this fund transferred to your name as manager-trustee <sup>300</sup> and to instruct the banks that all checks must be signed by you as manager-trustee.

If the proposed plan will not harmonize with your local require-

<sup>7</sup> A comma should always be placed after etc., unless the sentence ends with that word, in which case no period only should be used.

<sup>8</sup> See footnote 2 on page 131

<sup>9</sup> Spelled either *endorse* or *indorse*.

<sup>10</sup> The pass book is the book in which deposits are entered by the receiving teller of a bank.

ments, please state your objection to it by return mail.

Yours truly, (339)

5

Public Service Corporation of New Jersey,  
Trenton, N. J.

Gentlemen:

Attention of Mr. A. J. Braun,  
Treasurer

This office is in receipt of your letter of the 1st instant in which you state that in the year 1915 your corporation sold an issue of five-year first and consolidated mortgage bonds at a discount, and wrote off against surplus in that year the entire amount of the discount and refinancing expenses. You state further that a representative of this office who has been making an examination of your books has informed you that it is a rule of the department that if the above practice is followed no deduction therefrom can be made in years subsequent to that in which a loss through discount on bonds had been sustained and charged off against surplus.

In this connection you are informed that if the examining officer made the statement which you attribute to him it was evidently an error, inasmuch as this office has consistently held that discount on bonds issued by a corporation and the expenses incidental thereto should properly be distributed over the life of the bonds and an equal amount

be deducted annually instead of claiming the entire deduction in one year. Even though in the year 1915, when such bonds were issued at a discount, you charged the entire amount to surplus, this office is of the opinion that you are entitled to an annual deduction, based upon the life of the bonds, to make good at the time the bonds mature the entire loss which will have been sustained by your corporation through the discount on the bonds and expenses of issuing them. It is requested, however, that if possible you make entries on your books which shall show in future years the amount originally written off against surplus on this account in 1915, the number of years constituting the life of the bonds, and the amount claimed annually in preparing your return of annual net income. This would serve the purpose of furnishing the required information to any examining officer who might have occasion to examine your books in the future.

Yours very truly, (354)

6

Lehigh Valley Power Company,  
Allentown, Pa.

Gentlemen:

In support of my recommendation that you prorate the profit on the sale of your bonds over the five-year period and return as income one-fifth of the profit for the calendar year just closed, I submit the decision in the case of *Gray vs. Dar-*

1, 15 Wall 63.<sup>11</sup> In this case question was whether an advance in the value of bonds during a period of four years over their cost, added by their sale, was subject to taxation as gains, profits, or income for the year in which the bonds were sold. Justice Field said: <sup>100</sup> "The advance in the value of property during a series of years can, in just sense, be considered the same as profits, or income of any one particular year of the series, although the entire amount of the advance be not at the time turned into money by a sale of the property. The statute with some exceptions, for subjecting to taxation only to annual profits, and income. . . ."<sup>12</sup> It is a mere fact that property has increased in value between the time of its acquisition and sale does not authorize the imposition of the tax on the amount of the advance.<sup>300</sup> The advance in value in no sense constitutes the gains, profits, or income specified by the statute. It constitutes an increase of capital. The rule adopted by the officers to collect the revenue in the present case will justify them in treating as income of one year the increase in the value of property extending through a number of years—through even an entire century. The actual advance in value of property over its cost may, in fact, reach its height before the sale; the value of the

property may, in truth, be less at the time of the sale than at any previous period in ten years; yet if the amount received exceeds the actual cost of the property, the excess is to be treated, according to their views, as gains of the owner for the year in which the sale takes place. We are satisfied that no such result was intended by the statute."

Yours very truly, (364)

7

Indiana Farm Implement Co.,  
Gary, Indiana.  
Gentlemen:

We have your inquiry of the tenth with respect to the treatment of organization expense in your returns of annual net income.

In the first place, you should include under such expense fees paid to attorneys, accountants, and state authorities prior to or coincident with the securing of your charter and the incorporation of your company; also the expense of printing stock certificates, obtaining subscriptions to stock, and commissions paid to brokers for selling stock.

The Treasury Department has ruled that organization expenses constitute a capital investment, holding that such expenses are offset by the asset value of the corporate franchise, an intangible asset of a somewhat permanent character and in many instances of substantial value. The department claims that such

<sup>11</sup> This is a reference to the volume of law reports containing the decision on the case referred to.

<sup>12</sup> The periods indicate that a part of the decision is omitted at this point



expenses are very similar in character to the discount at which stock issued by a corporation is sold; the only effect of such expenses and discounts being to reduce the amount of capital available for the use of and employment in the business of the corporation. In the opinion of the department the discount at which stock is sold is not a loss sustained within the meaning of the law, and is therefore not deductible; likewise organization expenses<sup>200</sup> are not "ordinary and necessary expenses of maintenance and operation," which are the only expenses authorized by the income tax law to be deducted from gross income.

Accountants take exception to this ruling. The department by it introduces a practice which is unsound from the standpoint of good accounting and conservative financing. The tendency of the ruling is to raise and continue upon the books as an asset charges which in all prudence should be written off, representing as they do expenses which make no ultimate addition to the asset value of the corporate property. While you cannot under this<sup>300</sup> ruling deduct your organization expenses in your return of income, as a matter of conservative accounting policy we recommend that you write off<sup>13</sup> these expenses on your books. If profits do not justify their being written off in any

one year, they should at least be liquidated on some reasonable amortization basis, and spread over a period of at least five years.

Yours very truly, (365)

8

To Collectors of Internal Revenue:<sup>14</sup>

Losses due to fluctuations during a taxable year in the value of capital assets, even though evidenced by book entries, do not constitute "losses actually sustained" within the meaning of the law, and are not allowable deductions from gross income. Losses are not actually sustained until, as the result of a completed and closed transaction, they have been definitely ascertained and the amount they represent has irredeemably disappeared from the assets of the individual or corporation.

Likewise and conversely, any appreciation in the value of assets due to appraisal or adjustment and taken up on the books of the individual<sup>100</sup> or corporation is held not to be income within the meaning of the law until such appreciation, as the result of a completed transaction, has been converted into cash or its equivalent; that is, has been realized as an addition to and a part of the tangible assets of the individual or corporation. A book entry reflecting only an enhanced value of assets during the year evidences an increase in the net worth

<sup>13</sup> That is, charge off the item on the books by making a *contra* entry.

<sup>14</sup> This is a general letter from the Internal Revenue Office at Washington to collectors throughout the country. The closing phrase is omitted.

corporation or individual for year—an increase which under conditions may disappear the year. An increase in value evidenced is intangible <sup>200</sup> and le, and is not such income as federal income tax law contem shall be returned for purposes e tax.

eturnable and taxable income . actually realized during the that is, that which is evi- by | the receipt of cash or its lent. Until any appreciation ip on the books has been actualized, it | will not be required returned as income. Hence, in :paration of returns and in the ation of | books for the pur- f verifying reports, mere book of appreciation in the value ital assets will be | <sup>300</sup> disre-

should be understood, how- hat the profit or income to be d as a result of the sale | of that have been appreciated determined upon the basis of ference between the cost and elling price of the assets. values will be ignored except hey represent the actual cost of roperties. |

ry rulings previously made by ice in conflict with the holdings efore made are superseded by ter; but | any returns, adjust- or assessments made in ac- ce with previous rulings will ise be affected by this ruling. | <sup>400</sup>

9

The First National Bank,  
Williamsport, Pa.

Gentlemen:

We have audited the books and accounts of the First National Bank of Williamsport for the year ending December | 31, 1919. In detail our procedure was as follows:

#### RESOURCES

Loans and Discounts—These were verified by actual | inspection of the notes on hand. Certificates were obtained from correspondents<sup>15</sup> stating that they held for collection the notes which | were not produced. In all cases letters were sent to makers, or endorsers, requesting confirmation of the genuineness of the | notes; and in the case of collateral loans, the collaterals were stated in detail in the letters. Replies have been | <sup>100</sup> received from borrowers whose notes make up 97.48 per cent. of the total. The securities | pledged as collateral were appraised and the margins were found to be ample in each case.

Stocks and Bonds—These | were verified by inspection. The appraisal of these securities shows that they are carried at a conservative valuation.

Due from | Banks—Statements have been received from correspondents, and all differences have been reconciled.

Cash and Cash Items—The cash in | vault was verified by

See the definition of *correspondent bank* on page 109.

actual count. The cash items were verified by inspection and were traced to final payment. Certificates <sup>200</sup> were obtained from each member of the Clearing House stating that all the exchanges were paid as of January 2. Certificates were obtained from reserve agents stating the balances they held, and all differences were reconciled.

All Other Resources—All items appearing under resources in the accompanying statement and not specially mentioned above were verified and found to represent real assets.

#### LIABILITIES

Surplus and Undivided Profits—The earnings for the year ending December 31, 1918, were analyzed and found to be correct.

Due to Banks—Statements of account were sent to correspondents, and certificates obtained stating that the <sup>800</sup> balances were correct.

Deposits—As many pass books as possible were balanced. Requests for a confirmation of their balances were mailed to those depositors who did not send in their pass books. Certificates stating that balances were correct have been received from individual depositors whose balances compose 93.66 per cent. of the total.

All Other Liabilities—All items appearing under liabilities in the accompanying statement which are not specially mentioned above were verified and found to be correctly stated.

We certify that the accompanying statement shows the true financial condition of the First National Bank <sup>400</sup> at the close of business December 31, 1919.

Respectfully submitted, (412)

10

Winchester Farm Supply Company,  
Winchester, Virginia.  
Gentlemen:

We had a conference yesterday with the Collector of Internal Revenue on your income tax reports. The department rules that the agreement whereby Mr. Wilkins receives ten per cent. of the annual net profits established a partnership which has existed since the date of that agreement; consequently your returns for 1914 to 1917, both inclusive, had to be prepared upon a partnership basis and separate returns made for each partner. Furthermore, as the department has no record of granting you permission to report returns for the fiscal year, and as the old income tax law did not <sup>100</sup> allow individuals to report upon the basis of fiscal years, we had to revise and adjust all these returns to cover calendar years and file revised returns, copies of which are enclosed.

The collector declined to allow Mr. White a salary deductible as expense of more than \$10,000.00, holding all sums he receives in excess of that amount as being in the nature of a distribution of profits and therefore not deductible from income. The ten per cent. of profits credited to Mr. Wilkins' account is

allowed as an expense. We that you deducted your 1916 income tax as an expense in 1917 report. Income taxes are deducted as deductions. In 1916 you purchased an automobile truck for \$1000.00 which was charged to a general expense account, whereas a capital investment that would have been charged to delivery account. The collector used to allow excessive deductions of \$1599.00 and the return bad debts of \$1793.50, which are not deductible under the collector's rules and regulations.

As to the matters very recently mentioned and succeeded in retaining a number of deductions as shown on the enclosed statement, but the above mentioned items could not be successfully defended and for that reason we recommend the execution of the necessary papers and affidavits submitted and the payment of the additional tax, which amounts to \$1000.00.

The collector will accept the return in full settlement if the return is promptly signed and returned, otherwise he will render a return for delinquent taxes of \$1000.00 and permit you to file a return for abatement of overpaid amounting to \$13,269.72. As I have to pay the first installment immediately and wait three or four years for a settlement of your claim, the wise thing is to pay the additional tax

Yours very truly, (452)

### 11

To Collectors of Internal Revenue:

The term "farm" embraces the farm in the ordinarily accepted sense, plantations, ranches, stock-farms, and all lands used for similar purposes; and for the purposes of this ruling all persons who cultivate, operate, or manage farms for gain or profit, either as owners or tenants, are designated as "farmers."

All gains, profits, and income derived from the sale or exchange of farm products, whether produced on the farm or purchased and resold by a farmer, shall be included in the return of income for the year in which the products were actually marketed and sold. All allowable deductions, including the legitimate expenses incident to the production of that year or future years, may be claimed in the return of the income for the tax year in which the right to such deductions shall arise, although the products to which such expenses and deductions are incidental may not have been sold or exchanged for money or a money equivalent during the year for which the return is rendered.

Rents received in crop shares shall likewise be returned as of the year in which the crop shares are reduced to money or a money equivalent, and allowable deductions, likewise, shall be claimed in the return of income for the tax year to which they apply, although expenses and deductions may be incidental to products which remained unsold at the end of the year for

which the deductions are claimed. When farm products are held for more favorable market prices, no deduction on account of shrinkage in weight or physical value, or losses by reason of such shrinkage or deterioration in storage shall be allowed.

The cost of stock purchased for resale is an allowable deduction when the contra income from the sale of such stock is<sup>100</sup> reported. Money expended for stock for breeding purposes is regarded as capital invested, and the amounts so expended do not constitute allowable deductions except as hereinafter stated.

When stock has been purchased for any purpose and afterwards dies from disease or injury, or is killed by order of the authorities of a State or the United States, and the cost thereof has not been claimed as an item of expense, the actual purchase price of such stock, less any depreciation which may have been previously claimed, may be deducted as a loss. Property destroyed by order of the authorities of<sup>400</sup> a State or the United States may, in like manner, be claimed as a loss; but if reimbursement is made by a State or the United States, in whole or in part, on account of stock killed or property destroyed, the amount received shall be reported as income for the year in which reimbursement is made.

A person cultivating or operating a farm for recreation or pleasure on a basis other than the recognized principles of commercial farming, the

result of which is a continual loss from year to year, is not regarded as a farmer. If the expenses incurred<sup>100</sup> by such persons on their farms are in excess of the receipts therefrom, the entire receipts from the sale of products may be ignored in rendering a return of income, and the expenses incurred, being regarded as personal expenses, will not constitute allowable deductions in the return of income derived from other sources. (553)

## 12

subdivision 1 section 3 act of october 22 1914 imposes an annual tax upon bankers of \$1 upon each \$1000 of capital surplus and undivided profits used or employed during the preceding fiscal year many inquiries have been received from bankers as to the proper method of arriving at the amount of undivided profits to be used as the basis upon which the tax is to be computed when such undivided profits have varied or fluctuated in T. D.<sup>16</sup> 19707 dated november 29 1914 it was held that the undivided profits should be figured for each business day and the average thereof taken as the amount of undivided profits to be used in computing the tax due in many instances it is clear that such a method would be more or less impracticable and involve too lengthy a calculation in arriving at the basis desired therefore while the daily average of undivided profits is the one absolutely

<sup>16</sup> This abbreviation indicates Treasury Department Decision #19707.

accurate method of ascertaining the total of capital surplus and undivided profits this office will hereafter accept returns in which the undivided profits are computed in such manner as to represent a fair and just average amount of the undivided profits employed by the bank during the

fiscal year preceding the year for which the tax is due it should be understood that in the event the amount of undivided profits reported by the banker is questioned the average undivided profits are to be computed for each business day as set forth in T. D. 19707 respectfully

### OFFICE TRAINING ASSIGNMENTS

You are employed by Rodway, Burchard & Kessler, Certified Public Accountants, with offices in New York, Chicago, and Pittsburgh. Your teacher is the manager of the Chicago office.

#### TECHNICAL TERMS

A careful study of the technical terms used in accounting work will give you a familiarity with many words and expressions common to all lines of business.

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

Use the form of date arrangement shown in the style letter in all correspondence in this section.

**Assignment 1.** Make a copy of the style letter with carbon on form 14.

**Assignment 2.** Copy letter 7 with carbon on a letterhead. Submit both letters for approval.

#### POWER OF ATTORNEY

A Power of Attorney is a written instrument under seal by which a party appoints another to act for him. Form 15 in the budget shows a Power of Attorney which has been filled out in longhand. Detach it and read it through carefully.

**Assignment 3.** Fill in form 16 on the typewriter. Leave the line for the signature blank. Hand in your work.

#### PHONOGRAPH DICTATION

In some offices dictation is handled by means of a machine of the type of the Dictaphone. The process of dictation and transcribing is thus described in the literature of the Columbia Graphophone Company, distributors of the Dictaphone.

## TO DICTATE

Snap on the switch when you begin your day's work. Slip a blank cylinder on the mandrel of the Dictaphone. Set the "dictate" lever, get your papers before you and talk naturally and easily into the receiver. Press the hand (or foot) control while you are speaking, and release it whenever you stop. Indicate any corrections on the memorandum pad as you go along. Whenever you want to hear what you have dictated, reverse the "dictate" lever and listen.

When a cylinder is filled, place the papers with it in the rack.

## TRANSCRIBING

Your operator snaps on the switch when she begins her day's work. She slips your dictated cylinder on the mandrel of her Dictaphone, throws down the reproducer lever, hangs the hearing tubes lightly on her ears, or adjusts the clarophone, presses the foot control, listens to your first few words, and begins typewriting. When the dictation goes too fast for her, she releases the foot control until she catches up.

Further information on the subject of handling dictation by mechanical means will be found in the literature and instruction books issued by the companies who manufacture and sell such machines.

**Assignment 4.** In case the school is equipped with an outfit for phonograph dictation, your teacher will assign some practical work.

## ADDING AND LISTING MACHINES

Automatic calculating machines are now widely used in the auditing and financial departments of practically all business houses. Machines of the type manufactured by the Burroughs Adding Machine Company write and list figures automatically, add them, and print the totals. Machines of the type of the Comptometer do not make written records of figures but are used to find the *results* of arithmetical computations. Literature describing such machines may be obtained from their manufacturers.

**Assignment 5.** If such machines are available, practical exercise work will be provided by your teacher.

## OTHER OFFICE APPLIANCES

Many other machines for saving time and labor in the business office are in use.

In case it is desirable to know the exact time that incoming mail is received, *clock dating machines* are used to stamp the correspondence. The stamp shows not only the date but the hour of the day as well.

*Automatic envelope sealers* are used when the volume of business is very large.

*Addressing machines* automatically print addresses by means of prepared stencils.

Machines of the type of the *Writerpress* and *Multigraph* print from movable type and are used to produce large quantities of a circular, form letter, price list, etc.

In every large city will be found agencies of companies which manufacture office devices. They will gladly provide literature for further study. In many cases actual demonstrations of the operation of such machines can be arranged for at the school.

#### FINANCIAL STATEMENTS

The preparation of the various types of statements used in the accounting departments of business houses provides good tests of the stenographer's skill in arrangement and accuracy in the writing of figures.

**Assignment 6.** Make a copy of the Trading and Profit and Loss Statement given below.

#### Trading and Profit and Loss Statement, December 31, 1919, R. K. Carlton & Co.

| Returns                                    |          |          |          |
|--|----------|----------|----------|
| Gross sales.....                           | 30291.89 |          |          |
| Less—Goods returned.....                   | 77.16    | 30214.73 |          |
|  |          |          |          |
| Less—Sales rebates and allowances.....     | 79.16    |          |          |
| Less—Sales discounts.....                  | 704.52   | 783.68   |          |
|  |          |          |          |
| Net returns from sales.....                |          | 29431.05 |          |
| Costs                                      |          |          |          |
| Inventory, January 1, 1919.....            | 3678.14  |          |          |
| Purchases.....                             | 26495.03 |          |          |
| Less—Goods returned.....                   | 132.16   |          |          |
| Less—Goods donated to charity at cost..... | 52.25    |          |          |
| Less—Purchase rebates and allowances.....  | 37.41    | 221.82   | 26273.21 |
|  |          |          |          |



|   |        |          |          |
|---|--------|----------|----------|
| Freight-In on Purchases.....            |        | 769.19   |          |
| Warehouse supplies.....                 |        | 176.19   |          |
| Warehouse labor.....                    |        | 180.50   |          |
|   |        |          | <hr/>    |
| Total cost of purchases.....            |        | 30377.23 |          |
| Less—Purchase discounts.....            |        | 698.12   |          |
|   |        |          | <hr/>    |
| Net cost of purchases.....              |        | 30379.11 |          |
| Less—Inventory, December 31, 1919.....  |        | 5227.86  |          |
|   |        |          | <hr/>    |
| Cost of merchandise sold.....           |        | 25151.2  |          |
|   |        |          | <hr/>    |
| Gross trading profit for the month..... |        | 4279.8   |          |
|   |        |          |          |
|   |        |          | Incomes  |
| Interest.....                           |        | 27.1     |          |
|   |        |          | <hr/>    |
| Total income.....                       |        | 4306.9   |          |
|   |        |          |          |
|   |        |          | Expenses |
| Selling expenses                        |        |          |          |
| Salesman's salary (C. E. Murray).....   | 100.00 |          |          |
| Advertising.....                        | 56.25  |          |          |
| Entertainment.....                      | 31.80  |          |          |
| Miscellaneous.....                      | 7.09   | 195.14   |          |
|   |        |          | <hr/>    |
| Traveling expense (C. E. Murray).....   |        | 53.82    |          |
| Freight-Out on sales.....               |        | 177.23   |          |
| Delivery expenses                       |        |          |          |
| Horse feed and supplies.....            | 25.68  |          |          |
| Wagon maintenance..                     | 7.15   |          |          |
| Driver's and helper's wages.....        | 75.00  |          |          |
| Miscellaneous.....                      | 5.67   | 113.50   |          |
|   |        |          | <hr/>    |
| Total selling expenses.....             |        | 539.69   |          |

|   |         |             |
|---|---------|-------------|
| Administration expenses                         |         |             |
| Office supplies and stationery. . . . .         | 42.75   |             |
| Postage, telegrams, and telephone. .            | 26.78   |             |
| Salaries of partners. . . . .                   | 400.00  |             |
| Salaries of office help. . . . .                | 120.00  |             |
| Miscellaneous. . . . .                          | 2.18    | 591.71      |
|   |         | <hr/>       |
| General expenses                                |         |             |
| Rent. . . . .                                   | 100.00  |             |
| Fuel and light. . . . .                         | 55.12   |             |
| Miscellaneous. . . . .                          | 9.56    | 164.68      |
|   |         | <hr/>       |
| Insurance expense. . . . .                      |         | 10.75       |
|   |         | <hr/>       |
| Total expenses. . . . .                         |         | 1306.83     |
|   |         | <hr/>       |
| Net profit for the month. . . . .               |         | 3000.11     |
| Distribution of profit                          |         |             |
| R. K. Carlton, Capital a/c, 2/3 profit. . . . . | 2000.07 |             |
| T. Allen, Capital a/c, 1/3 profit. . . . .      | 1000.04 |             |
|   |         | <hr/> <hr/> |

**Assignment 7.** Copy the Statement of Resources and Liabilities shown below. After finishing your work have another student read the statements while you check your own work very carefully. Hand in both statements.

Statement of Resources and Liabilities, December 31, 1919,  
R. K. Carlton & Co.

|  |          |
|--|----------|
| Resources                              |          |
| Cash. . . . .                          | 7166.77  |
| petty Cash Drawer. . . . .             | 200.00   |
| Inventory, December 31, 1919 . . . . . | 5227.86  |
| Notes Receivable. . . . .              | 3976.49  |
| Accounts Receivable. . . . .           | 13649.13 |
|  | <hr/>    |
| Total current resources. . . . .       | 30219.25 |

|                                   |                    |          |          |
|-----------------------------------|--------------------|----------|----------|
| Furniture and fixtures .....      |                    |          | 947.25   |
| Delivery equipment.....           |                    |          | 4475.00  |
| Insurance.....                    | 118.25             |          |          |
| Sundry resource inventories.....  | 112.06             |          | 230.31   |
|                                   |                    | <hr/>    | <hr/>    |
| Total resources.....              |                    |          | 35891.81 |
|                                   | <b>Liabilities</b> |          |          |
| Notes payable.....                |                    | 2698.47  |          |
| Accounts payable.....             |                    | 5748.35  |          |
|                                   |                    | <hr/>    |          |
| Total current liabilities.....    |                    | 8446.62  |          |
| Sundry liability inventories..... |                    | 27.45    |          |
| C. E. Murray, Salesman.....       |                    | 3.16     |          |
|                                   |                    | <hr/>    |          |
| Total liabilities.....            |                    |          | 8477.43  |
|                                   |                    |          | <hr/>    |
| Net resources.....                |                    |          | 27414.38 |
| Represented by                    |                    |          |          |
| R. K. Carlton, Capital a/c.....   | 16276.18           |          |          |
| Add 2/3 profit.....               | 2000.07            | 18276.25 |          |
|                                   |                    | <hr/>    |          |
| H. T. Allen, Capital a/c.....     | 8138.09            |          |          |
| Add 1/3 profit.....               | 1000.04            | 9138.38  | 27414.38 |
|                                   |                    | <hr/>    | <hr/>    |

## AUDITOR'S REPORT

Mr. Burchard has just completed an audit of the books of one of our clients, The Calumet Lumber Company of Spokane, Washington. A corrected rough draft of his report is shown on form 17.

**Assignment 8.** On plain paper write a final copy of the report to be submitted to the client.

## PUNCTUATION AND PARAGRAPHING

**Assignment 9.** The notice on page 140 embodies a decision of the Commissioner of Internal Revenue on the matter of accounting for "undivided profits." Read it through and decide on the punctuation. We wish to send copies to some of our clients. Write the notice with two carbons, adding the signature "Commissioner of Internal Revenue." Give the copies to the manager

## TRANSCRIBING

**Assignment 10.** Five accounting letters will be dictated to you for transcription.

## FILING

Whenever it is necessary to take a folder from the files, a guide card with a tab on which is printed the word "out" should be inserted in its place. The individual who takes the folder from the file writes his name and the date on which the file is removed on the "Out" card. By this simple expedient correspondence taken from the files can always be readily located.

**Assignment 11.** Prepare folders for the letters you have written in this section and file the correspondence in the alphabetical file.

## SECRETARIAL PRACTICE

**Assignment 12.** The manager: "I wish you would send for a copy of the latest edition of Montgomery's 'Income Tax Procedure.'" You find that the book is published by the Ronald Press, 20 Vesey Street, New York.

**Assignment 13.** You have just had a letter from the manager, who is in St. Louis engaged on an important audit, stating that he will be detained there two or three days longer than he expected. Upon looking in the appointment book you find that it will be impossible for him to keep several important engagements. Wire the Oriental Steamship Company (letter 2) that Mr. \_\_\_\_\_ cannot be with them on the 2d and stating that you will telegraph again just as soon as he returns to the office.

Your chief also had an appointment with the Indiana Farm Implement Company (letter 7) at Gary, the day after tomorrow. Write them a courteous letter stating that the assistant manager will call on them. (See letter, page 128.)

**Assignment 14.** The National City Bank of New York has published the complete text of the Income Tax Law. Write them for five copies.

**Assignment 15.** Make a list of the more widely used office appliances and machines with a brief statement of the purpose of each.

**Assignment 16.** The manager: "You remember we drafted a power of attorney empowering Mr. Lybrand of Philadelphia to sell Mr. Stevens' stock. Mr. Stevens is staying temporarily in Chicago. Write him and enclose both the original and duplicate so that he may add his signature. Tell him to keep the duplicate and return the original to us and we will send it to Lybrand. I want you to write him. Stevens is staying at the Sherman Hotel."

# Williams & Wilkins Company

## PRINTERS

BINDERS, ELECTROTYPERS, ENGRAVERS

PUBLISHERS OF SCIENTIFIC JOURNALS

110 Federal Street

BOSTON, MASS. April 20, 1920.

The Freeland Manufacturing Co.,

Greenfield, Mass.

Gentlemen:

We submit the following quotations on the printing outlined in your letter of April 16:

- 100 Pads Order Blanks, each pad to consist of 50 original sheets and 50 duplicate sheets; the originals to be perforated and both sets to be numbered; printed in two colors, red and black; the size and binding to be the same as sample submitted.  
Price.....\$117.50
- 500 Agreements and duplicates, both to be on white Resolute Ledger #32, padded in pads of 25 originals and duplicates; size 8½ x 14.  
Price..... 12.50
- 5000 Bills of Lading in triplicate, on a good grade of onion skin paper; colors to be--original blue; duplicate cherry; triplicate on white three-ply Bristol; padded in pads of 150, 50 of each form to a pad.  
Price..... 57.50

We can put these orders in process beginning April 28 and can promise delivery on May 2. Your past experience with us is sufficient evidence that you will receive first-class workmanship, and we hope to be favored with your order.

Yours very truly,

WILLIAMS & WILKINS COMPANY

*R. F. Williams*  
Secretary - Treasurer

## PRINTING AND PUBLISHING SECTION

### TECHNICAL TERMS

- te line**—a line of ordinary newspaper type.
- argeols** (bōōr-zhwa')—a size of printing type measuring about one hundred lines to the foot; next larger than *brevier* and smaller than *long primer*.
- chure**—a pamphlet; a printed or stitched booklet containing only a few leaves.
- tion**—the heading or title of a chapter, section, or page.
- omolithograph**—a colored picture or print produced by means of a number of prepared lithographed stones. (Abbreviated to *chrome*.)
- rendon**—a condensed form of printing type with thickened lines.
- late**—to verify the arrangement of the sheets of a book after they have been gathered.
- positor**—one who sets type.
- ete**—to take out or expunge.
- nmy**—a set or sheet of leaves made up, as by binding, to represent a book or pamphlet to be printed.
- ctrotype**—a copy in metal of any engraved surface. Often called simply an *electro*.
- (**ēm**)—the unit of type measurement.
- boss**—to raise or project figures, letters, or designs in relief upon surfaces.
- atum** (plural *errata*)—an error.
- hing**—a plate or engraving produced by a special process involving the use of acids.
- o**—a sheet of paper once folded; a page number.
- t**—a complete assortment of printing type of one size.
- ntispiece**—an engraving placed opposite the title page of a book.
- faced type**—type of the ordinary plain face but with thick lines that print bold. Called also *bold-faced* type.
- ley proof**—a proof or impression from type on a *galley* before it is made up into pages, taken for a first reading. A *galley* is a tray for holding type.
- f-tone**—a picture printed from a plate produced by a special photoengraving process; also the plate itself.
- erlinear**—inserted between lines.
- tifying**—the act of arranging spaces in a line of type so as to make all the lines of equal length.
- out**—the plan or arrangement of a printing job.
- erpress**—printed text; often so called when subordinate to or in contrast with illustrations; a press for copying letters.
- otype**—a type-setting machine that casts each line of type in one piece.
- ograph**—a print from a writing or design on stone.

- lithotint**—the process of producing pictures in colors from lithographic stones; also the picture so produced.
- make-up**—the arrangement of type into pages or columns preparatory to printing.
- manuscript**—written matter as distinguished from anything that is printed; the original copy from which the type is set.
- matrix**—a mold or pattern form.
- minion**—a small printing type.
- monograph**—a treatise on a single subject.
- Monotype**—trade name for a machine which casts and sets in order single types.
- multicolor**—having several colors.
- nonpareil**—a small printing type.
- octavo**—consisting of sheets folded into eight leaves. (Abbreviated to 8mo.).
- perforate**—to bore or cut small holes in, usually in a straight line.
- photoengraving**—the process by which plates for use in a printing press can be produced through the medium of photography; the plate so produced.
- photogravure**—an engraved metal plate for printing; the impression from such a plate.
- pica** (pī'-ka)—a size of printing type about six lines to the inch.
- preface**—an introduction to or a statement of the purpose of a book.
- proofreader**—a person who reads printer's proofs for correction.
- quadricolor**—having four colors.
- quarto**—consisting of sheets folded into four leaves. (Abbreviated to 4mo.).
- rotary press**—a printing press in which the types or plates to be printed are fastened upon a rotating cylinder and impressed on a continuous roll of paper; thus distinguished from *flat-bed* press.
- running head**—a legend repeated at the top of every page in a book.
- signature**—a letter or figure placed by the printer at the foot of the first page of every section or gathering of a book; one section of a book consisting of the pages printed in one form.
- single leaded**—Lines of type divided by one thin strip of metal are said to be *single leaded*. Leads are strips of metal used in spacing lines of type.
- stereotype**—a plate forming a facsimile of a page of type or of an engraving used in printing books; also the process of printing from such plates.
- stet**—a proofreader's order to cancel an alteration previously made by him; to *let stand* as it originally was.
- typographical**—pertaining to typography, or the use of types for printing; as, *typographical errors*.
- upper case**—denoting the capital letters as distinguished from the small or *lower case* letters.
- vignette** (vīn-yēt')—an engraving with a border insensibly fading away; also a decorative design at the head of a chapter.

## CORRESPONDENCE

1

ugh H. Hardy,  
ditor, Journal of Anthropology,<sup>1</sup>  
Clark University,  
Worcester, Mass.

Dr. Hardy:

our opinion, the photo-  
graphs to illustrate Dr. Harper's  
"A Study of Racial Stature,"

not be vignettted. If a  
hundred line screen is used and  
half-tones are trimmed square  
flush, with the backgrounds  
cut out, the results obtained will  
be much more effective. The illus-  
trations will be cheaper for the mak-  
ing and the press work will be  
less expensive. If you think it ad-  
visable, we will have a sample illus-  
tration made and submit it to you  
proceeding<sup>3</sup> with the order.

As we understand the instruc-  
tions contained in your letter of <sup>100</sup>  
March 10th, you wish three sets of galley  
and the manuscript mailed to  
send an additional set of gal-  
proofs mailed to Dr. A. Parker  
Harris, Glenolden, Pa. These in-  
structions will be complied with.

Yours very truly, (139)

2

Rockefeller Institute for Medical  
Research,  
66th St. & Ave. A,  
New York City.<sup>4</sup>

Gentlemen:

We acknowledge receipt of the  
copy for the errata slip for Number 3  
of Volume 28 of the Journal of  
Experimental Medicine. We can  
bind this slip in the front of Number  
4, which is to be issued this  
month. We suggest that it be set in  
8 point,<sup>5</sup> 31 Monotype, 24 pica ems<sup>6</sup>  
measure, and that it be tipped in to  
face the second page cover.

As a matter of fact, this errata  
slip properly belongs in Number 3,  
and it might be better to add a note  
suggesting that the reader attach it  
to his copy of that number. To  
provide for this we could gum it  
underneath the right edge in the  
manner in which the flap of an  
envelope is gummmed.

Please let us know immediately if  
this meets with your approval.

Yours very truly, (143)

Look up the meaning of this word in the dictionary.

See the definition of *etching* on page 149.

What is the difference in meaning between *proceed* and *proceeder*.

Do not write "New York City, N. Y."

A *point* is a small unit for measuring type.

Consult the meaning and pronunciation of these two words given on pages 149 and 150.



3

The Wistar Institute of Anatomy  
and Biology,  
36th St. & Woodland Ave.,  
Philadelphia, Pa.

Gentlemen:

We enclose a dummy signature showing our recommendations for the form of make-up of the preliminary pages for | Monograph No. 68. We recommend that the title proper be illuminated by printing the lines as indicated in English | vermilion, the balance to be in black ink.

You will observe that we have started both the contents and the | list of illustrations, as well as the preface, with a right-hand folio. This is the correct make-up. If | you have any suggestions to offer, we shall be glad to hear from you promptly.

In the make-up of |<sup>100</sup> the volume index for "Biological Research," I suggest that it be set in nonpareil or six point type, single leaded, | the author's name or the title of the paper to be set to the full measure, and any overrunning to | have a hanging indentation of two ems. This arrangement in my opinion will be in good form, and I am sure | it will prove satisfactory.

Sincerely yours, (166)

4

The Harvard University Press,  
Cambridge, Mass.

Gentlemen:

We have carefully considered the specifications submitted for the "Mili-

tary Historian and Economist." You specify minion or seven point | type for the footnotes, bourgeois or nine point for the quoted matter in the text, the text proper to be | set in small pica or eleven point. Minion and bourgeois are newspaper faces. We have never had occasion to install | them as a part of our monotype equipment, because for book work there is practically no demand for them. We | recommend that the subsidiary matter be set in ten point solid and the footnotes in eight point leaded. This is a |<sup>100</sup> standard which we have adopted for practically all of our scientific publications, as the page thus obtained gives a | very uniform color effect with sufficient distinction to prevent any confusion. Will this type arrangement be acceptable?

We recommend a | royal octavo for your catalog announcement. It is the established size for catalogs of educational institutions, and we do not | think it advisable to depart from it.

Very truly yours, (170)

5

Dr. Albert Hardwick,  
Smithsonian Institute,  
Washington, D. C.

Dear Doctor:<sup>7</sup>

We are having considerable difficulty in maintaining a sufficient number of compositors in our composing room. It will | help us considerably if you will permit us to set the captions of the "American Jour-

<sup>7</sup> In salutations of this type do not write "Dear Dr." "Dear Dr. Hardwick," however, would be correct. Refer to the salutation in letter 6, page 153.

l of Physical Anthropology" in |  
 arendon face long primer type on |  
 r Monotype machine. If we use |  
 e condensed antique old style, it |  
 ill be | necessary to set the cap- |  
 ons by hand. The type we recom- |  
 end is similar to the condensed |  
 itique and will give | the same |  
 neral effect, while its usq will |  
 fect a saving in the cost of com- |  
 sition.<sup>8</sup> Will this be satis- |  
 ctory? <sup>100</sup>

We suggest that the placards be |  
 t in eighteen point or great primer |  
 pe, double leaded, and recommend |  
 e old | style face rather than the |  
 odern. We also think they should |  
 e printed on a snow-white board, |  
 evel-edged<sup>9</sup> | in gold to give a |  
 nished appearance.

We hope to receive an early reply |  
 ecause we shall not place these |  
 obs in process<sup>10</sup> until we hear from |  
 ou.

Very truly yours, (171)

6

Dr. E. M. Brush,  
 Superintendent, Sheppard and  
 Pratt Hospital,  
 Towson, Md.

My dear Dr. Brush:

I have your letter of May 16.  
 As a souvenir to be given to the  
 subscribers | to the dinner held in

commemoration of Dr. Chapin, I  
 suggest a brochure with the following  
 specifications:

Paper, 25 | x 38—80 lbs.<sup>11</sup> Laid  
 Antique Alexandria Book.  
 Cover, 20 x 25—Single Thick,  
 Copper, Antiquarian Cover,  
 with | an insert fly of the  
 same stock.

Type, to be set in 12 point Cas-  
 lon Old Style to 22 | x 34  
 picas, single leaded, printed  
 in black ink throughout,  
 with margins as indicated on  
 the sample page submit-  
 ted | <sup>100</sup> with the enclosed  
 dummy, the insert to be  
 saddle wire-stitched and  
 saddle sewed with silk floss,  
 showing a quarter | of an  
 inch square all around.

I suggest that we omit the run-  
 ning head and set the page folio  
 at | the bottom to the bind.<sup>12</sup> I  
 also think a photogravure frontis-  
 piece taken from Dr. Chapin's por-  
 trait, which hangs in the | hospital  
 library, would be appropriate.

The cost of producing seven hun-  
 dred and fifty (750) copies of this  
 brochure would be \$386.00, | and I  
 sincerely trust that you will favor us  
 with the contract.

Yours very truly, (199)

<sup>8</sup> That is, setting the type.

<sup>9</sup> See the definition of *bevel-edged* given on page 21.

<sup>10</sup> That is, begin the work.

<sup>11</sup> 25 x 38—80 pounds means that the paper is 25 x 38 inches in size and weighs 80 pounds to the ream  
 of 500 sheets.

<sup>12</sup> That is, near the bound edges of the paper.

7

Thomas C. Clark, Ph.D.,<sup>13</sup>  
The University of Virginia,  
Charlottesville, Va.

Dear Dr. Clark:

We are confident that the color illustrations for your biography<sup>14</sup> of Dr. John H. B. Latrobe can be reproduced successfully by the multi-color process. We suggest using the quadricolor instead of the three-color method. In our opinion the reproductions will more nearly resemble the originals than if we attempted to lithograph them, and the cost will probably be fifty per cent.<sup>15</sup> less.

We suggest that you permit us to have a plate made for one of the illustrations. If you are not then entirely satisfied, we can have an illustration lithographed and so make<sup>16</sup> a direct comparison between the two processes. For the letterpress we recommend a hand-made, antique, wove paper, printed in a dull black ink.

We have carefully studied the problem of composing your monograph, "The Literary Saturnian,"<sup>17</sup> and have reached the conclusion that it will be impossible to handle the work by using the standard product from the type foundries. It will be necessary to have special matrices<sup>17</sup> cut for the characters illus-

trating the phonetic sounds, which will have to be justified by hand before interlining.

The composition can be handled successfully and economically in this manner, and we shall<sup>18</sup> be very glad to undertake the work.

Yours very truly, (210)

8

Mr. C. Wilson Bateman,  
Editor, University of Michigan  
Alumni<sup>18</sup> Magazine,  
Ann Arbor, Michigan.

Dear Sir:

In our opinion the Linotype is not desirable for the highest standard of book work. It is somewhat cheaper when measured and sold on the basis of foundry em body, but if the measurement is made according to the set of the type, the Monotype process will set about ten per cent. more words to the page. The saving thus effected<sup>19</sup> is equivalent to the difference in the cost of the two processes.

The closer letters are brought together, the more legible is the word. The eye does not read single letters; it reads words or groups of<sup>19</sup> words. The Linotype necessarily has a space between the letters, whereas by the Monotype process, in which each character is cast separately, it is

<sup>13</sup> Abbreviation for the title "Doctor of Philosophy."

<sup>14</sup> Look up in the dictionary.

<sup>15</sup> Use the period. Per cent. is an abbreviation for the Latin phrase *per centum*, meaning *by the hundred*.

<sup>16</sup> Look up this word in the dictionary.

<sup>17</sup> This is the plural of *matrix*, the definition of which is given on page 150.

<sup>18</sup> Plural of *alumnus*. Consult the dictionary for the meaning of the word.

<sup>19</sup> Can you distinguish accurately between *effect* and *affect*?

le to bring the letters com-  
g a word closer together. Fur-  
ore, the word spacing on the |  
ype is standard for all sizes of  
while on the Monotype it is in  
rtion to the face of | the type.  
Ve have adopted the Monotype  
king books and magazines of a  
standard in order to secure |  
advantages, which in our opin-  
re very important ones. We  
; you that the difference in cost  
en the | <sup>200</sup> two processes is a  
ible factor, and trust that the  
tages of using the Monotype  
l above will justify you | in  
ng us with the contract for  
facturing your journal.

Yours very truly, (233)

9

s. Dobler & Mudge,  
13 Richmond Place,  
Columbus, Ohio

emen:

The chromolithograph supple-  
to "La Figaro"<sup>20</sup> will make a  
attractive picture for a calendar,  
ends itself | admirably to re-  
ction by the three-color process.  
l confident that the full color  
can be retained in | the  
duction. I suggest that the  
d be deleted and that the head  
med with a reproduction of a |  
ntine gilt frame, the frame to be  
ed in gold and embossed. The  
ssing plate can be made satis-

factorily by | photoengraving on  
brass. I am sure that by deep etch-  
ing the results will be satisfactory,  
and the plate will | <sup>100</sup> cost considerably  
less than if it were cut by hand.

Warren's Cameo Plate, a dull  
coated paper, 25 x | 38—100 lbs.<sup>21</sup>  
should be used in the printing and  
embossing. The finished plate will  
be mounted on | an eight ply litho  
board with the calendar pad stapled  
underneath. We suggest punching  
two holes at the top and | looping  
them with a silk cord for hanging.

Our price on one thousand calen-  
dars of these specifications, size  
14 x | 22 inches, is \$987.50. It will  
require about eight weeks' time to  
complete | <sup>200</sup> the order.

We hope to be favored with this  
business, and I assure you that I  
will give it my | careful personal  
attention.<sup>22</sup>

Yours truly, (225)

10

Frederick Fairfield Sherman, Esq.,  
1790 Broadway,  
New York City.

Dear Sir:

The copy for the catalog of  
Tapestries and Chinese Rugs of the  
Morgan Collection which you desire  
to | have printed in a full-faced type  
is received. Antique Old Style is the  
proper type to use. We have | a  
full foundry series in 6, 8, 10, 12, 14,  
and 18 point. In the 8, 10, and 12

<sup>20</sup> A French magazine.

<sup>21</sup> See footnote 11 on page 153.

<sup>22</sup> Note that the writer uses the plural pronoun when he refers to his company, but the singular form  
e wishes to emphasize his personal interest.

point | we have five pairs of cases of each size, which give us fonts averaging about 250 lbs. — | sufficient type to set forms of 32 pages.

We estimate from the ms.<sup>23</sup> submitted that the catalog will probably | <sup>100</sup> run about 128 pages. It will be necessary to compose and print the catalog in sections; that | is to say, we will set the first signature, print, knock down<sup>24</sup> the type, and then set the second signature, | and so on. If the proof is read and returned promptly, we could complete the job within sixty days. We | recommend printing at least 500 copies, and suggest that all of the sheets be folded and collated, 100 | copies bound in boards, the balance bundled and stored for future binding.

As you propose to furnish the stock and | <sup>200</sup> have the binding done in New York, it will be more economical for us to do the type setting and | press work on an hourly basis. We quote a rate of \$1.75 per hour for the | composing time, and \$2.50 per hour for the press work.

We are prepared to start this work | immediately and shall take particular interest in giving you our very best service. We believe that we can produce a volume | which will be entirely satisfactory.

Yours very truly, (288)

11

The Camden Bargain House,  
Camden, N. J.

Gentlemen:

Attention Messrs. Ferris and Beech

We are in receipt of the layout of your fall catalog and Mr. Ferris'<sup>25</sup> | letter of instructions of June 15.

There seems to be a misunderstanding as to the way in which this job | is to be printed. Mr. Beech has marked five forms "F" to indicate that they are to be run flat-bed, | and eleven forms "R" to be run rotary-coated, whereas the proposition we made to you under date of | June 9 provides that we are to have nine forms<sup>26</sup> for flat-bed printing, leaving seven forms to be printed | <sup>100</sup> on the rotary in New York and shipped to us for binding. Mr. Ferris also states that you will not | require over 200,000 copies, while our quotation was based upon a run of 500,000.

In making | our bid we figured that with nine forms we could print them as 32's<sup>27</sup> and then insert the colored | inserts, in this way bringing the job within the capacities of our present binding machines. On a run of 500,000 | we also figured to increase our binding capacity ten more boxes, but if you will not require over | <sup>200</sup> 200,000, it will hardly

<sup>23</sup> Abbreviation for *manuscript*. The abbreviation of the plural is *mss.*

<sup>24</sup> That is, separate and distribute the type.

<sup>25</sup> In the interest of simplicity the apostrophe only is used to form the possessive case of proper nouns ending in *s*.

<sup>26</sup> A form consists of the plates or types for varying numbers of pages (from 4 to 32) clamped together for printing purposes.

<sup>27</sup> That is, in forms of 32 pages each.

able for us to make this  
al investment.

view of the above | we trust  
e possible for you to give us  
printing, in addition to the  
" | forms, any two of the  
; three groups of forms:  
41- 56 and 61- 78 |  
17-132 and 135-154  
57-485 | and 485-500<sup>28</sup>

ess we can have the nine  
e originally quoted upon, we  
have to print in 16's, which  
ease our quotation on the  
ork 25¢ per hour. On | the  
edition there will be no  
on the binding.

trust you will reconsider the  
nd let | us hear from you at  
ly convenience.

Respectfully yours, (350)

12

ublished method of handling  
ading in the printing busi-  
o read the galley proof with  
older correct the typographi-  
rs revise it and mail the gal-  
f to the author for his read-  
er it has been returned by the  
the changes and corrections  
e has noted on the proof are

made the galleys are then made up  
into pages and the page proof is sub-  
mitted to the author for second read-  
ing after the authors final corrections  
are made the printer gives the page  
proof what is technically known as a  
silent or final reading that is the  
proofreader reads the proof without  
a copy holder in order to eliminate  
not only typographical errors but to  
see that the matter is in good form  
well spaced etc in order to handle  
the large volume of publication work  
which passes through our press on a  
definite schedule we have found it  
necessary to depart somewhat from  
this method and have adopted the  
plan of giving the final reading on the  
galley immediately after the first  
reading has been completed with the  
copy holder when the page proof is  
released for press this plan enables us  
to make the final corrections and lock  
up the form without the delay incident  
to giving the matter the final reading  
at the last moment when there is  
usually pressure for time our experi-  
ence in following this method over a  
period of ten years has proved that  
it is just as dependable as the estab-  
lished custom we hope that you will  
approve of it in the handling of your  
publications yours very truly

hat is, forms composed of pages 41 to 56, 61 to 78, etc.

## OFFICE TRAINING ASSIGNMENTS

You are now employed by the Williams & Wilkins Co., Boston, Mass., as stenographer to the vice-president, the position occupied by your teacher.

## TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

## ARRANGEMENT

Study the arrangement of the style letter. Observe the indentation of the address. In this office the stenographers are assigned numbers. RFW-2 indicates that the letter was dictated by Mr. Williams to stenographer number 2.

**Assignment 1.** Copy this style letter with carbon on form 18.

**Assignment 2.** Copy letter 6 with carbon on a letterhead. Single space the items of the specifications, but double space the rest of the letter as shown in the style letter. Submit both letters for approval.

## FORMS OF REMITTANCE

## POST OFFICE MONEY ORDERS

Money orders are issued by the post office for amounts under \$100. An application is made out as shown in illustration 12. The applicant pays to the post office the amount he wishes to send plus the fee and receives an order like the one illustrated, which he sends to the payee after detaching the receipt. The recipient takes the order to his post office and after endorsing it receives the money.

**Assignment 3.** Secure from any post office two applications for money orders and fill them out on the typewriter from the following information:

1. The secretary of the Williams & Wilkins Company wishes to send a money order for \$1.30 to the Disbursing Clerk, Post Office Department, Washington, D. C., in payment of two copies of the Postal Guide. Make out the application. Note Williams & Wilkins' address on the letterhead of the style letter. What will be the fee on this money order?

2. We also wish to send a money order for \$37.50 to one of our salesmen. Mr. C. W. Swenson, Templeton Hotel, Marlboro, Mass. Make out the application. What is the total amount that must be paid to the post office on this order?

(Form No. 6001)

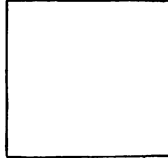
# Post Office Department

THIRD ASSISTANT POSTMASTER GENERAL  
DIVISION OF MONEY ORDERS

No. \_\_\_\_\_  
Stamp of Issuing Office

The Postmaster  
will insert

|         |       |
|---------|-------|
| DOLLARS | CENTS |
|         |       |



here .....  
the office drawn on, when the office named by  
the remitter in the body of this application is not a Money Order Office.

Spaces above this line are for the Postmaster's record, to be filled in by him.

## Application for Domestic Money Order

Spaces below to be filled in by purchaser, or, if necessary,  
by another person for him

Amount

Nineteen Dollars 50 Cents

Pay to } A. C. McClurg & Co.  
Order of } (Name of person or firm for whom order is intended)

Whose }  
Address } No. 216 S. Wabash Ave. Street

Post }  
Office } Chicago,

State Ill.

Sent by R. M. Randall,  
(Name of Sender)

412 Browning St.

Address }  
of } No. Little Rock, Ark. Street

PURCHASER MUST SEND ORDER AND COUPON TO PAYEE.

ILLUSTRATION 12—APPLICATION FOR POST OFFICE MONEY ORDER

|  |                         |  |                         |
|--|-------------------------|--|-------------------------|
| 19023<br>New Philadelphia, Ohio.         | 224450<br>SERIAL NUMBER | New Philadelphia, Ohio.<br>19023<br>OFFICE NUMBER  | 224450<br>SERIAL NUMBER |
| <b>United States Postal Money Order</b>  |                         |  |                         |
| HE POSTMASTER AT<br><u>Baltimore Md.</u> |                         | Coupon for Paying Office<br>NOT TO BE REISSUED OR DULSED   |                         |
| 1918 101 9                               |                         | DOLLARS <u>17</u> CENTS <u>10</u>  |                         |
| Paying Office<br><u>W. H. Albenweiss</u> |                         | REMITTER<br><u>J. Jaffard</u>  |                         |
| STAMP HERE                               |                         | THIS MONEY ORDER IS NOT GOOD FOR MORE THAN LARGEST AMOUNT INDICATED ON LEFT-HAND MARGIN OF THE ORDER AND ANY ALTERATION OR ERASURE RENDERS IT VOID |                         |
| RECEIVED PAYMENT                         |                         |  |                         |

ILLUSTRATION 13—POST OFFICE MONEY ORDER



## EXPRESS MONEY ORDERS

The various express companies also issue money orders. An example is shown below. Written applications need not be made.

| EXPRESS MONEY ORDER  |  |
|--|--|
| WHEN COUNTERSIGNED BY AGENT AT POINT OF ISSUE  | A- 5914832   |
| <b>American Express Company</b>  |  |
| AGREES TO TRANSMIT AND   |  |
| Pay on presentation to <u>H. M. Rowe Pub. Co.</u> or order                                       | DOLLARS <u>4</u><br>CENTS <u>—</u>   |
| THIS MONEY ORDER SHOULD NOT BE CASHED FOR STRANGERS EXCEPT ON PERSONAL IDENTIFICATION.           |  |
| The Sum of <u>Four</u>   | 100 Dollars  |
| NOT GOOD FOR MORE THAN THE HIGHEST PRINTED MARGINAL AMOUNT — IN NO CASE TO EXCEED FIFTY DOLLARS. |  |
| Countersigned <u>Halliburton Abbott Co.</u> Agent  | NAME OF REMITTER <u>J. P. Gray</u> TREASURER                                     |
| issued at <u> Tulsa </u> State of <u> Okla </u>  | <u> Helen J. Simpson </u>  |
| Date <u> Oct-25 </u> 19 <u> 17 </u>  | ANY ERASURE, ALTERATION, DEFACEMENT OR MUTILATION OF THIS ORDER RENDERS IT VOID. |

ILLUSTRATION 14—EXPRESS MONEY ORDER

## CHECKS

The most common form of remittance in business is the check. A check is a written order directing a bank or banker to pay money as stated therein. It is presumed that the party writing the check has funds on deposit against which he issues the check.

| AMERICAN LINSEED COMPANY,                           |   |
|---|---|
| HELLOGO & McDUGALL WORKS                            |   |
| BUFFALO, N.Y.                                       | December 12 19 20 No 2149   |
| PAY TO THE ORDER OF <u>Louisiana Cotton Company</u> | \$ <u>3742.50</u>   |
| Three Thousand Seven Hundred Forty Two & 50/100     |   |
| DOLLARS   |   |
| TO THE PEOPLES BANK OF BUFFALO,<br>BUFFALO, N.Y.    | AMERICAN LINSEED COMPANY,<br><u>Daniel B. Knight</u><br>TREASURER |

ILLUSTRATION 15—CHECK

**Assignment 4.** Fill in the blank checks marked form 19 from the following information. Never typewrite an individual's signature on a check or other business document. Sometimes company names are typewritten or printed, in which case they invariably require a pen-written signature to authen

ticate them. Never typewrite any part of a signature unless your employer instructs you to do so. We deposit at the Massachusetts National Bank.

1. Check # 462 for \$422.50 in favor of The Strathmore Paper Company
2. No. 463 for \$296.86 drawn to American Express Company
3. No. 464 for \$1462.70 to the American Type Founders Company
4. No. 465 for \$325.18 to the Whitaker Paper Co.
5. No. 466 for \$250.60 to Barton, Dyer & Koch
6. No. 467 for \$56.25 to Consolidated Electric Power Co.

## CERTIFIED CHECKS

When a check has been "certified" by a bank, it is immediately charged to the account of the drawer, and the bank becomes responsible for its payment.

|                          |  |   |
|--------------------------|--|---|
| UNION FIRE INSURANCE CO. | No. 1873   | BUFFALO, N.Y. February 26, 1920                         |
|                          | <b>MACHINE NATIONAL BANK</b><br>OF BUFFALO                       |   |
|                          | PAY TO THE ORDER OF Treasurer of the State of New York \$ 525.00 |   |
|                          | Five Hundred Twenty Five & no/100 DOLLARS                        |   |
|                          | Countersigned:<br><i>W. Wilson</i> President                     | <i>W. F. Chan</i> Secretary<br>Union Fire Insurance Co. |

ILLUSTRATION 16—CERTIFIED CHECK

## CASHIER'S CHECKS

A cashier's check is a form of check issued by banks in paying money to those who are not depositors, and is usually signed by the cashier, or it may be signed by the president or other authorized officer.

|  |  |  |
|--|--|--|
|  | <b>THE MERCHANTS BANK</b> No. 6784   |  |
|  | Lexington, Ky. June 5, 1920  |  |
|  | Pay to the order of James A. Weldon & Co. \$ 211.75                          |  |
|  | Two Hundred Eleven & 75/100 Dollars  |  |
|  | To The HANOVER NATIONAL BANK, NEW YORK CITY. <i>Arthur C. Wilcox</i> Cashier |  |

ILLUSTRATION 17—CASHIER'S CHECK

## CERTIFICATES OF DEPOSIT

A certificate of deposit is an instrument issued by banks certifying that the party named therein has deposited funds to the amount stated. Such deposits draw interest when made for a definite period, but unless otherwise stated certificates of deposit are payable on presentation and demand.

**The Northwestern National Bank of Minneapolis** No. 545

Minneapolis Minn. October 17 1920

John Walter Hansome has deposited in this Bank  
One Thousand Dollars \$ 1000.00

payable to the order of himself

in current funds on the return of this Certificate properly endorsed, six months after date with interest at 4 per cent per annum. This Certificate to bear no interest after maturity.

J. Harrison

ORIGINAL

ILLUSTRATION 18—CERTIFICATE OF DEPOSIT

## PROMISSORY NOTES

A promissory note is an unconditional promise to pay a specified sum of money at a definite future time. There are two principal (and original) parties to a note, the *maker* and the *payee*. The maker is the party who signs the note—who makes the promise. The payee is the party in whose favor the note is made—the one to whom the money is to be paid.

\$ 5750.00 New York April 15 1920

Sixty days after date we promise to pay to  
the order of Raymond K. Douglass

Five Thousand Seven Hundred Fifty Dollars

at the National City Bank of New York.

Value received

Stevens Coal Company

J.B. Merchant

Countersigned  
James L. Brown  
President  
No. 145 Due June 14, 1920

ILLUSTRATION 19—PROMISSORY NOTE

**Assignment 5.** Fill in the blank notes marked form 20 from the following information, making the notes payable at our bank, and present them for signature.

1. Note # 205 in favor of West End Paper Company for \$1140.70, payable 60 days from the current date. Insert the due date.
2. Note # 206 in favor of Weeks Photo-Engraving Company for \$1250, payable in 30 days from the current date, with interest at 6%. Insert the due date.
3. Note # 207 in favor of American Type Foundry Co. for \$1050.70, payable three months from the current date with interest at 6%.

## DRAFTS

A draft is a written request of a first party, or the *drawer*, to a second party, or the *drawee*, to pay a third party, or the *payee*, a specified sum of money. The giving of a draft presupposes that the drawer has funds in the hands of the drawee, which will be paid at the time specified in the draft, and also that, if the drawee fails to make such payment to the payee, the drawer will pay.

|   |                                   |                       |       |          |
|---|-----------------------------------|-----------------------|-------|----------|
| \$ 272.45   | New York,                         | September 21          | 19 20 | No. 1962 |
| At 10 days  | sight                             | Pay to the order of   |       |          |
| <b>JAMES BUCHANAN &amp; CO.</b>                   |                                   |                       |       |          |
| Two Hundred Seventy Two & 45/100                  | Dollars                           |                       |       |          |
| Value received, and charge the same to account of |                                   |                       |       |          |
| To  | The Connecticut Valley Lumber Co. | JAMES BUCHANAN & CO., |       |          |
| Hartford, Conn.                                   | Robert W. re.                     |                       |       |          |

ILLUSTRATION 20—DRAFT

**Assignment 6.** Draw the following drafts for the company on the forms marked 21 and present them for signature.

1. Number 172 at sight for \$122.75 on The Haynes Stationery Co., Malden, Mass., in favor of "Ourselves." This is a "sight draft" in which the Williams Wilkins Co. is both the drawer and payee.
2. Number 173 at thirty days' sight for \$2145.18 on The Stevenson Publishing Co., Attleboro, Mass., in favor of the Central National Bank, Attleboro. This is a "collection time draft." The Stevenson Publishing Co. will agree to pay the draft by writing across the face of it "Accepted," the date, and its signature. Name the drawer, payee, and drawee.

3. Number 174 at sight for \$269.20 on Clark & Mason, Frederick, Md., in favor of the Merchants-Mechanics First National Bank, Baltimore, Md. This is a "collection sight draft." No acceptance of this draft is necessary because Clark & Mason will either pay it immediately upon its presentation or refuse to do so.

## TRADE ACCEPTANCES

A trade acceptance is a time draft representing the obligation arising from the sale of a particular bill of merchandise, drawn by the seller on the purchaser and accepted by him. It is similar in form to a time draft.

|  |   |   |   |
|--|---|---|---|
| TRADE ACCEPTANCES<br>CHAMBER OF COMMERCE OF THE U. S. A.<br>NATIONAL ASSOCIATION OF CREDIT MEN<br>APPROVED BY AMERICAN BANKERS ASSOCIATION<br>REPRESENTED IN THE AMERICAN TRADE ACCEPTANCE COUNCIL | <b>TRADE ACCEPTANCE</b>   |   |   |
|  | No. 426   | May 13, 1920.   | \$ 728 & 96/100   |
|  | Pay to the order of   | Two months  | after date pay to the order of OURSELVES                          |
|  | SEVEN HUNDRED TWENTY EIGHT & 96/100   |   | Dollars   |
|  | <small>THE OBLIGATION OF THE ACCEPTOR HEREON IS LIMITED TO THE PURCHASE OF GOODS FROM THE DRAWER. THE ACCEPTOR MAY MAKE THIS ACCEPTANCE PAYABLE AT BANK, BANKER OR TRUST COMPANY IN THE UNITED STATES WHICH HE MAY DESIGNATE.</small> |   |   |
|  | To Carter, Webster & Co.,<br>Brockton, Mass.  | Accepted by<br>Carter, Webster & Co.<br>By <i>R. L. Longman</i> | The New England Foundry Co.<br>By <i>R. L. Longman</i> Treasurer. |
| Due July 13, 1920.   |   |   |   |

ILLUSTRATION 21—TRADE ACCEPTANCE

**Assignment 7.** Draw the following trade acceptances for the company on the blanks in the budget (form 22) and present them for signature.

1. Number 20 dated today and payable 30 days hence for \$150.00 to the Fischer Advertising Agency, Wilmington, Del.
2. Number 21 dated today and payable 60 days hence for \$178.50 to Walter S. Rinehart & Co., 206 First St., Framingham, Mass.
3. Number 22 dated today and payable in two months for \$575.95 to Ally & Bacon, Boston, Mass.

## PUNCTUATION AND PARAGRAPHING

Letter 12 is a notice we are sending out at the present time to our customers.

**Assignment 8.** After reading it through carefully write the letter with carbon to the following:

Mr. C. K. Higginson, Editor, Journal of Experimental Psychology, Clark University, Worcester, Mass.

The F. C. Mifflin Co., 464 S. Fourth St., Philadelphia, Pa.

## TRANSCRIBING

**Assignment 9.** The vice-president will dictate to you five letters taken from the regular correspondence of the Williams & Wilkins Company.

## FILING

In filing correspondence in a vertical file, the sheets should always be placed on the *left* edge. A letter may thus in many cases be consulted without removing it from the files. The sheets should be placed neatly in the folder so that their edges will not protrude.

**Assignment 10.** File the correspondence in this section in the alphabetical file.

## SECRETARIAL PRACTICE

**Assignment 11.** The vice-president: "Here are a couple of firms that ask us to get up new letterheads for them. Try your hand at the job and let me see the result." (Study critically all the letterheads in this book and such others as are available. What characteristics, in your judgment, distinguish an effective letterhead?) The firms referred to are W. C. Weldon & Bros., wholesale grocers, Wilmington, Del., and Henry W. Savage Co., retail shoe dealers, Chester, Pa. Supply the addresses and any additional information you think should go on the letterhead. The Savage Company has consistently featured its "slogan"—"Tis a feat to fit feet.")

**Assignment 12.** The vice-president: "I see that this Freeland account (see letter, page 148) is more than sixty days overdue. Look through their file and then write them a courteous letter. These people are good customers but low pay.' Remember that the proper tone in such a letter is very important." From the file you learn that the Freeland Company accepted our proposition, and we delivered the order as promised. Our regular terms are 2% 10 days, net 30 days. We sent them two statements, but have had nothing from them.

**Assignment 13.** Assume that the checks you have prepared (page 161) have been paid, canceled, and returned to us. File them alphabetically in your check file.

**Assignment 14.** The vice-president: "We have received checks from the firms on whom we drew drafts (page 163). Make out a deposit slip for these checks." (Blank deposit slips may be secured from any bank.)

LYMAN C. HERRICK, President

ROBERT B. FOSTER, Vice-President

ALBERT HERRICK, Secretary-Treasurer

## HERRICK-FOSTER COMPANY

IMPORTERS, MANUFACTURERS, AND WHOLESALEERS

Office of the  
General Manager

DRY GOODS, SUITS, CLOAKS, GOWNS,  
MILLINERY

CABLE ADDRESS  
"HERRFO"

NEWARK, NEW JERSEY

January 14, 1920.

Munson & Block Co.,  
1222 Hennepin Avenue,  
Minneapolis, Minn.

Gentlemen:

Miss Eleanor May Kent designed the dresses illustrated in the folder sent you a few days ago. We hope that you can place some of these garments in stock. We call your attention to the following models, which have proved to be the most popular:

No. 2134, made in an exceptionally soft and pliable taffeta of Japan blue, with plaitings of fine net of the same color.

No. 2135, made only in honey color organdie. It depends upon its material cut in old-fashioned points for trimming, and blue ribbons for charm.

No. 2136, a dainty confirmation frock of spotless white voile, sprayed with embroidery and made over satin, with Brussels net to add a transparent finish.

No. 2138, a pretty scalloped dress of cool mignonette green challis bound in black moire.

No. 2140, a little tot's frock of sheer batiste with hand embroidered edges and trimmings of blossom pink ribbon.

We have many other desirable gowns featuring the crosswise tucks like those on the blouse and tunic of gown No. 2130, which is the only trimming to be found on many of the smartest Easter frocks.

We thank you very much for your inquiry, and hope to be favored with your order for a trial lot of these dresses.

Yours truly,

HERRICK-FOSTER COMPANY  
*Roland B. Carter*  
Sales Department

RBC:CK

## DRY GOODS AND CLOTHING SECTION

### TECHNICAL TERMS

- ixture**—a cloth containing a mixture of cotton and wool.
- rigan**—brown or unbleached cotton cloth used for underwear and hosiery.
- ce**—a close-fitting waist or body of a gown.
- het** (krō-shā')—a kind of knitting worked with a hooked needle.
- ian**—a woman's outer garment with a cape over the arm instead of a sleeve.
- roidery**—figured ornamentation worked into a fabric by means of threads.
- ice**—a gathered or plaited strip on a skirt.
- l-piping**—the sewing around a hole in a fabric to prevent ravelling; as a buttonhole.
- l-scalloped**—applied to a design worked into a fabric usually at or near the edge.
- l-smocked**—applied to a gathering or crossing of threads sewed in a fabric as ornamentation.
- l-tufted**—applied to the shaping of a fabric by sewing into small, irregular folds or tufts.
- ono**—a loose-fitting robe of light material worn by women about the house.
- erie**—lace-trimmed underclothing worn by women.
- allion**—an ornament of lace or crochet inserted in a woman's costume.
- erized**—applied to fabric treated with a solution of alkali and alcohol, causing it to shrink and to dye better.
- crocking**—non-fading; applied to dyes the coloring matter of which does not rub off or wash out.
- ed**—folded; made in or with flattened folds.
- material**—material identical with another in kind and color.
- age**—the edge of a fabric so finished that it does not ravel out.
- er**—very thin or transparent and delicate.
- red**—puckered or gathered.
- idy**—the wool of old woollen fabrics torn to pieces and remade with an admixture of wool into new cloth.
- uette**—a term used to describe straight-line models of women's coats suits, etc.
- e**—a long narrow scarf worn over the shoulders.
- erweight**—applied to heavy-weight fabric.
- lice**—an outer linen vestment with wide sleeves.
- tch**—a piece or strip of cloth used as a sample.
- ic**—a loose garment, gathered or girded at the waist.
- edo**—a dinner coat; applied to garments made with a long rolling collar.
- l**—fabric woven in diagonal line effect.
- sted**—a cloth made from woollen yarn or thread which is twisted harder than usual in spinning.



## NAMES OF DRY GOODS, FURS, COLORS, ETC.

|             |                |            |            |
|-------------|----------------|------------|------------|
| alpaca      | crepe          | lisle      | poulette   |
| batiste     | crepe de chine | longcloth  | repp       |
| bessette    | dimity         | maize      | sable      |
| bisque      | duotone        | marten     | satin      |
| brocade     | ermine         | messaline  | seersucker |
| cambric     | faille         | meteor     | serge      |
| camelshair  | fichu          | mignonette | taffeta    |
| cashmere    | fisher         | moire      | taupe      |
| challis     | foulard        | muskrat    | tricolette |
| chambray    | gabardine      | muslin     | tricotine  |
| chamoisette | georgette      | nainsook   | turquoise  |
| champaign   | gingham        | nutria     | tussah     |
| charmeuse   | glacé          | organdie   | tweed      |
| cheviot     | helio          | pastel     | velveteen  |
| chiffon     | henna          | percale    | vigoreaux  |
| chinchilla  | jacquard       | picot      | voile      |
| corduroy    | lavender       | piqué      |            |
| covert      | linene         | pongee     |            |

## CORRESPONDENCE

I

Messrs. Oliver C. Blackburn & Co.,  
110 Cornell Avenue,  
Fitchburg, Mass.

Gentlemen:

On August 4 our salesman turned in to us your order covering the following:

50 dozen gray flannel shirts | style N-2788.<sup>1</sup> It is our understanding that these shirts are to be made with faced sleeves, | buttons on facing.

5 cases balbriggan underwear style C-277, short sleeve shirts, ankle drawers.

50 dozen boxes | silk lisle hose #2-765, double soles, high-spliced double heels, reinforced non-tearing garter hem. |

As yet we have not received your confirmation of this order. We are entirely sold out of the fabric for<sup>100</sup> the flannel shirts ordered with the exception of the quantity laid aside for you. Please let us know immediately if | we shall proceed to make up these shirts. Our stock of hose #2-765 is also | getting short.

We await your reply by return mail.

Yours truly, (151)

<sup>1</sup> Dictate "N dash two seven eight eight."

2

Marroll M. Jamison,  
3 Belvedere Ave.,  
Baltimore, Md.

Madam:

One of our most valued customers we extend to you this special invitation to our annual spring-time presentation of new wearables for which mothers will find to be the most interesting event in babies' of the year. The offerings

include: dainty baby slips and dresses, made and hand-made, in nainsook, muslin, linen, voile, and dimity, with ruffled collars, pin-tucked, lace and dresden round yoke effects, and down collar styles.

Beautiful babies' lingerie and varieties including flannel petticoats and Gertrudes, hand-scalloped slips, cambric Princess slips, gowns of nainsook and long-sleeved, etc.

There are also knit bands and knit booties, sacques, hand-dresden bibs, and cashmere kid

particular interest are the carriage robes with hand-scalloped edge and hand-tufted robes of silk and Jap silk in pink and

the prices we are offering this season you will be astonished at the savings we have. We trust you will have the pleasure of assisting in outfitting the little one during our Baby Week at Macy's.

Cordially yours, (182)

3

Mr. H. Y. Allison,  
Allison & Mitchell Co.,  
Greensburg, Pa.

Dear Sir:

Mr. Davidson has sent me your letter of April 15 directed to our New York office regarding the camel-hair garments manufactured by the Winsted Underwear and Hosiery Co. If my recollection is correct, this garment is a great deal darker in shade and more of a reddish brown than our old #261. While D. W. Campbell & Co. are agents for the Winsted hosiery, their underwear is sold through the American Knitting Mill Co. I believe they sell to the retail trade only and not to jobbers.<sup>2</sup>

I think the last garment made by Rufus Appleton & Co. (of course I saw only a small sample swatch) comes nearer our #261 than any other garment I have seen. I am sorry that we were compelled to drop this number, but owing to the increase of sales on the Natural it was impossible for us to keep up the production. We were selling only a few of the camelshair in comparison with our sales on the Natural. You have probably seen the camelshair garment which the Lackawanna people are making.

If I can be of further service to you, do not hesitate to call upon me.

Yours truly, (205)

<sup>2</sup> Jobber is one who buys goods in bulk and resells them to small dealers.

4

Mrs. Wm. T. Ambrose,  
Great Neck, L. I.,<sup>3</sup> New York.

Dear Madam:

We acknowledge receipt of your letter of the 12th and regret that we cannot comply with your request | regarding the hat which you wish to return. It is our unalterable rule not to place in stock any merchandise | of a sanitary nature which has been in the possession of a customer, even though such merchandise may never have | been used. You will realize, we feel sure, that the protection of our patrons makes such a rule imperative, and, | although it deprives us of the pleasure of serving you in this instance, we trust you will agree that it |<sup>100</sup> is a necessary safeguard.<sup>4</sup>

With reference to your inquiry about gowns, in our Anniversary Sale which will open next Wednesday, | we will feature a splendid collection of women's exclusive outer garments in advanced modes that are truly distinctive and in fabrics | that have received fashion's sanction. In the collection are magnificent dinner gowns of laces, net, and georgette from \$85 | to \$115; printed georgette frocks for afternoon wear, also foulards in attractive combinations at \$35 | to \$95; and street and afternoon frocks in tailored and embroidered models in tricolette, poulette, satin, foulard, |<sup>200</sup> taffeta, and meteor, reflecting the most recent fashion inclinations in beaded, em-

broidered, surplice, tunic, and crushed girde effects in an | array of lovely colorings.

May we have the pleasure of a visit from you during this sale?

Yours very truly, | (240)

5

Messrs. Meriden & Palmer,  
876 Oak Park Ave.,  
Dunkirk, N. Y

Gentlemen:

From the numerous orders we have been receiving recently for fall delivery, I believe that our enormous production will | be fast sold out notwithstanding the fact that we have added two new factories to our organization.

It will not | be necessary for our field representatives to travel so extensively this season, but we have decided to visit personally our | best customers so as to fully take care of their requirements and give their orders the personal attention that is | required. I shall shortly call upon you and a few more of my friends who have not booked their orders |<sup>100</sup> for July, August, and September delivery.

Our new #587 and #597 work shirts with | faced sleeves, double stitched underneath facing, double stitched all over, will be of special interest to you this year.

I | also desire to show you our new Elite line of reinforced silk hosiery for women. We are using

<sup>3</sup> Long Island.

<sup>4</sup> Note the courtesy with which the writer explains the reason for the refusal of the request.

the purest unloaded Japan and non-crooking dyes, which prolong the life of the silk and protect the wearer's feet. These are full-lined hose of all-over pure thread double silk tops, made on special tread machines<sup>200</sup> that knit in the without seams. They have plied triple heels and double and toe. There are some very models with Paris lace clocks lace insteps.

I shall wire you shortly giving details on which I expect to call on you.

Sincerely yours, (249)

6

J. Hampton Griswold,  
Baltimore, Md.

Madam:

You are cordially invited to the store to inspect the fashion-spring furs we will place on display next Tuesday morning. The need for fine light-weight furs for winter and summer wear has been met in this presentation of many handsome scarfs of mink, fox, sable, marten, fisher, and seal. These all come in single lined animals or in several skins in animal, stole, or cape effect. Prices range from \$35 to \$595. Among the gorgeous offerings are the following, to which we desire your particular attention: Cape of Summer Ermine and Bisque Georgette in draped effect \$285

Taupe Flying Squirrel and Georgette Cape, a very smart and becoming style \$150

Taupe Suede Leather Sport Coats, with collar, cuffs, and border of mole or nutria \$225

Hudson Seal (Sheared Muskrat) Ties \$25

Hudson Seal (Sheared Muskrat) Stoles \$110

Mole Crushed Collar \$55

We also wish to announce that we are now making special summer prices for the remodeling of furs and fur coats, and that winter furs<sup>200</sup> are now being received for storage during the summer. When you are ready to place in storage the seal coat you purchased from us last fall, we shall be very glad to give it a careful steaming free of charge.

In extending this invitation, we also wish to thank you for your patronage in the past.

Respectfully yours, (258)

7

Mrs. J. E. Spicer,  
The Oaks,  
Lakewood, Ohio.

Dear Madam:

You failed to enclose the sample of covert cloth in your order of December 13; therefore, we must await its receipt before filling the order.

In reply to your request that we charge the order, permit us to in-

form you that in the interest of all our customers we do not extend credit to any one.<sup>6</sup> Our business | is transacted on a strictly cash basis. We buy and sell only for cash; hence, we occupy the strongest and | most commanding position in the merchandise markets of the world, and by this policy are enabled to sell our merchandise | <sup>100</sup> at prices lower than those of our competitors who purchase on time and who incur the heavy expense of carrying | their customers' accounts. Our policy is explained more fully in the enclosed booklet describing our Deposit Account Department.

The misses' | dresses about which you inquire are made in Bes-sette crepe and net batiste in white, flesh, gray, Belgian blue, or | navy. The back and front of the bodice are beaded in scroll effect. The bodice is collarless and has bell | sleeves. The skirt is plain with the tunic gathered at the waistline, the tunic being also beaded to match the | <sup>200</sup> bodice. There are also a number of silk frocks flounced and plaited<sup>7</sup> most attractively; several models have touches of handwork | for their only trimming. The prices range from \$10.00 to \$22.50.

We also direct your | attention to our new silk and satin coats for girls. We have them in French or navy blue, rose, and | lawn green.

Some are embroidered by hand and hand-smocked. Others are smartly tucked and have girdle sashes, while those | for smaller girls are in cunning high-waisted styles.

We await your reply and the sample of covert cloth with | <sup>300</sup> interest.

Yours sincerely, (303)

8

Milady's Glove Shop,  
232 Woodward Ave.,  
Detroit, Mich.

Ladies:<sup>8</sup>

We thank you for your letter regarding our latest lines of ladies' gloves. This season we have had an | unusually fine lot of soft kid to use in fashioning our kid gloves, which we are sure will delight the | most fastidious.

In answer to your various inquiries we submit the following:

The French kid gloves to retail at | \$3.50 are two-clasp, piqué-sewn, with Paris point or wide flat embroidery in white, pastel, beaver, black, | white with black and white back, and black with white and black back.

The French kid to retail at \$3.00 | <sup>100</sup> are in white with black embroidered backs, also in pastel with Paris point backs, overseam sewn.

The \$2.50 | French kid are two-clasp with self and contrasting em-

<sup>6</sup> Careful writers write *any one* as two words. Note also *some one* and *every one*, but *somebody*, *everybody*, and *everybody*.

<sup>7</sup> Sometimes spelled *pleated*, though the form *plaited* is preferred.

<sup>8</sup> The proper salutation to a firm consisting of women *Mesdames* is sometimes used.

ery in white, black, navy, tan, green.

The | \$2.25 Glace gloves are un-weight, one-clasp, in white self-embroidery, and white with | embroidery.

The \$2.50 Slipon kid gloves are hite with strap and buckle at wrist, | Paris spear backs, and -sewn.

The \$1.25 chamoisette is a two-glove in white, | <sup>200</sup> pongee, n, gray, and black with self contrasting stitching.

The \$1.25 Chamo Suede is a | lasp glove in white, champaign, yellow, fawn, and gray.

We also have a two-clasp wash-abric leatherette | quality glove ite, gray, and pongee. It is sure l well at \$1.75.

We | have liberal stocks of these s, but we are receiving heavy s, so we suggest that you let us | a statement of your require- s as soon as possible. We en- a confidential price list, the s in which will | <sup>300</sup> be found to be stently moderate.

Yours sincerely, (308)

9

Jasper W. Franklin,  
710 Freedom Avenue,  
Clinton, Iowa.

Madam:

We enclose our refund check for | covering the balance due you he | return of the middy blouse bathing cap included on the at- d bill. You have been credited \$1.38, | the price of the goods, 11¢ for return charges, making

a total credit of \$1.49. | Deducting from this amount 27¢, the balance due us, leaves \$1.22 | in your favor.

The 95¢ Milanese silk gloves about which you inquire are of heavy quality, pure | <sup>100</sup> silk, double tips, and heavy two-tone embroidery in black, navy, or gray, with white stitching; white with black; white | with gray; white with tan; and white with navy; all beautiful combinations to match any suit or gown.

We believe | our handsome new style spring waist, catalog #S-239, is just what you wish. This model is | of fine organdie and features the new Peter Pan collar. Both collar and cuffs are edged with picot, two rows | of which run down the center. Cro- chet buttons finish off this beautiful model, which may be had in lavender, rose, | <sup>200</sup> or blue, in sizes 36 to 44.

You might also be interested in our Bessette and lingerie blouses. | No. S-560 is a round neck model of sheer voile, trimmed with two rows of Irish lace and | crochet buttons, with lace trimmed plaited frills at the neck and sleeves, and tucked in back and front.

The #S-561 | is a sheer cream net blouse with double-breasted front, trimmed in medallion and pearl but- ton | effect, square or V-neck. cuffs finished with accordion plaited frills in Van Dyke point effect, and black ribbon tied | <sup>300</sup> to give a smart finish.

We hope to be favored with a visit from you in the near future and | thank you for your patronage in the past.

Yours very truly, (331)

10

Mrs. Marie K. Carlson,  
3404 Fairview Avenue,  
Forest Park, Wilmington,  
Del.

Dear Madam:

We thank you for your inquiry regarding house dresses. Our July sale on house and morning dresses, and porch and garden frocks, will begin Monday morning. We feel sure that you can make suitable selections from the splendid line we shall offer.

For \$7.29 we will have a number of dresses of percale, fresh and dainty, in stripes of blue, lavender, pink, and black and white, with collars of self material or of white linene and repp, in sizes 36 to 46.

For \$9.95 we will offer a charming porch dress of fine figured voile with pink, blue, lavender, and green checks, combined with lace; long roll collar and cuffs of white organdie, in sizes 34 to 46.

At \$10.95 there are three pretty dresses, one of white cross-bar dimity with dainty rosebuds of blue, pink, lavender, and maize; another of fine tissue gingham in wide stripes of blue, pink, and lavender; while the third model is of fine lawn in the same colors, with cluster striped collars of white lawn or dimity, long sleeves, skirt with deep hem and tucks or wide folds, and separate belt, in sizes 34 to 46.

These garments all come within the price you mentioned. We will have another dress for \$8.50 in which

you may be interested. It is a dainty charming dress of sheer woven tissue in helio, maize, pink, and blue, two color stripe, with picoted white dimity collar falling over a collar of self-material. The belt is detached and made in one long piece, plaited so that it can be worn as a sash or bow either back or front.

If you desire us to do so, we shall be very glad to send you an assortment of these dresses on approval at the sale prices so that you can make your selection immediately.

We thank you for your inquiry and await your reply with interest.

Yours very truly, (344)

11

Mandell Brothers,  
State Street,  
Chicago, Ill.

Gentlemen:

On Monday morning, October 25, we will be ready to receive buyers who desire to inspect our spring line. In suits the staple models of the season are in light-weight velours and serge. Mixtures of silk and wool are being used for wraps and coats.

Our line of fashionable suits includes suits of vigoreaux and men's-wear serge, and new and smart looking styles of tweed, tricotine, velour, covert, Poiret twill, wool poplin, and gabardine in all popular colors, with notched, shawl, or tuxedo roll collars, the trimness of

Some models relieved just a trifle with a <sup>100</sup> collar or vestee of white.

Coats, capes, and dolmans are in the approved silhouette models, fully lined with draped or half sleeves, monk or fichu collars, belted or full—are box backs, developed in tricotine, crystal cord, duotone, Poiret twill, abardine, cheviot, and wool velour in varied colors and black.

Three suits and two dolmans, all retail at approximately \$45.00, deserve particular mention:

\*360, navy blue serge suit, has a straight-line box coat with vest and collar of natural pongee, front trimmed with five rows of black braid, and by way of finishing it <sup>200</sup> has three hand-piped buttonholes and smoked pearl buttons. The two-piece skirt is shirred in back and has slit pockets.

\*361, navy blue serge suit, has a coat with full flaring skirtee finished with four rows of braid. The belt has novelty buckles front and back, button-trimmed, and it has an overcollar of white silk, and a silk lining. The skirt is one of the new narrow styles.

\*362, navy blue serge suit, is made with double box-plait coat, pin-tucked belt and three pin tucks around the bottom. The sleeves <sup>300</sup> are trimmed with buttons and the lining is of gray satin. The skirt is a straight-line model.

\*540 | all-wool velour dolman is yoke lined with fancy silk and has a smart, entirely new convertible collar faced | with faille silk and cuffs to match, in Victory, rose, Pekin, henna, tan, gray, and rookie.

\*541 | all-wool men's wear navy serge dolman is draped and lined throughout with fancy flowered tussah silk, with the novel | back handsomely button and braid trimmed.

We have made arrangements to conduct this display for two weeks and extend to <sup>400</sup> your buyer a cordial invitation to attend. We will as a rule make shipments in the order in which orders | are placed, and suggest that if you desire to place any special orders or make special arrangements as to shipping | dates, you have your buyer on the ground early.

Yours sincerely, (451)

12

we announce that we are now ready to show buyers our stock of fall and winter silks dress goods and domestic fabrics this stock consists of the product of our own mills and importations of the choice fabrics of leading french and english weavers in this display you will find exclusive tinsel brocades exquisite fancy silks dress and coating plushes velvets and velveteens wash satins dress satins taffetas messalines poplins



and jacquard novelties in cottons and domestics we have some very attractive gingham cheviots seersuckers cambrics muslins sheetings towelings and damask and mercerized tablecloths having served you in the past we take pleasure in inviting your buyers to inspect this

stock we enclose a few samples of the leading dress fabrics for this season these are the preferred numbers and colors we are prepared to receive our patrons at our new york showroom 1075 broadway new york city or at our main offices in newark yours very truly

### OFFICE TRAINING ASSIGNMENTS

In this section your employer is the Herrick-Foster Co., Newark, N. J. Your teacher is the general manager.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms. On a separate sheet copy the list of names of dry goods, furs, and colors. Practice the outlines.

#### ARRANGEMENT

Write the letters in this section in the form of the style letter, omitting the punctuation marks in the addresses.

**Assignment 1.** Copy the style letter with carbon on form 23.

**Assignment 2.** Copy letters 8 and 11 with carbons on letterheads. Present the letters for approval.

#### CREDIT MEMORANDUM

In all lines of business it is necessary to allow customers credit for returned, damaged, or defective goods, overcharges, etc. Such credits are evidenced by credit memorandums, which are made out by the seller and sent to the customer. It is customary on a credit memorandum to show the dates on which goods were invoiced.

**Assignment 3.** Prepare credit memorandums on the blanks in the budget (form 24) from the following information. Insert the current date. Use plain paper for the carbon copies.

To the Quality Shop 225 Central Ave., Oneida, N. Y., for

1½ doz. Palm Beach Suits, Inv. 4/12/20, Returned 57.50 86.25

|   |                                     |       |       |        |  |
|---|-------------------------------------|-------|-------|--------|--|
| To Batchker, Emmer & Co., 584 Broadway, New York, for |                                     |       |       |        |  |
| 1/3 doz.  | # 362 Poplin Dresses, Inv. 7/17/20, | 37.50 | 12.50 |        |  |
| 1 1/6 "   | # 4410 Crepe Gowns, " 7/23/20,      | 60.00 | 70.00 |        |  |
| 2   | # 1869 Ecru Robes, " 8/ 2/20,       | 9.95  | 19.90 | 102.40 |  |

|   |                   |      |        |       |       |
|---|-------------------|------|--------|-------|-------|
| To Daniel Miller & Co., 210 King St., Quebec, Can., for overcharge on |                   |      |        |       |       |
| 6 Bolts, 312 yds.   | # 306 Kapock Silk | 1.10 | 343.20 |       |       |
| " " " "   | " " " "           | 1.05 | 327.60 | 15.60 |       |
| 10 " 528 "  | Calais Gingham    | .14½ | 76.56  |       |       |
| " " " " " "   | " " " "           | .12½ | 66.00  | 10.56 |       |
|   |                   |      |        |       | 26.16 |

Memorandum of Credit  
**HERRICK-FOSTER COMPANY**

Newark, N. J., 1/28 19 20

To Stewart & Woodward Co  
626 Columbia Ave Trenton N J

We have credited your account for the following:

|   |    |    |    |    |
|---|----|----|----|----|
| 1/2 doz. #364 Poplin Dresses, Inv. 11/10/19 | 48 | 50 | 24 | 25 |
| 1/4 doz. #4415 Crepe Gowns, " 10/25/19      | 70 | 00 | 17 | 50 |
|   |    |    | 41 | 75 |

Please return this credit bill with your remittance

ILLUSTRATION 22—CREDIT MEMORANDUM

STATEMENTS OF ACCOUNT

Most business houses send on the first of the month a statement of account to each of their customers showing the amount due. Such statements usually include the balance at the first of the preceding month, charges and credits during the month, and the balance due at the end of the month. See illustration 23.

**Assignment 4.** Make up statements from the following information, using the blanks in the budget marked "form 25," dating them June 1 of the current year. Our term of credit is thirty days. Indicate the amounts past due at the top and bottom of the statements as shown in the illustration. Carbon copies of monthly statements are not made.

## DRY GOODS AND CLOTHING SECTION

Statement of Account

Ledger Folio 134**HERRICK-FOSTER COMPANY**

Newark, N. J., June 1 19 20

To Freeland & Mathison140 Franklin StHarrisburg Pa

Amount Past Due

Subject To Draft \$ 302.60

|     |    | Account Previously Rendered        |            |           |            |           |
|-----|----|------------------------------------|------------|-----------|------------|-----------|
| May | 1  | Balance                            | 348        | 40        |            |           |
|     | 5  | Mdse.                              | 446        | 16        |            |           |
|     | 18 | "                                  | 79         | 40        |            |           |
|     | 24 | "                                  | <u>144</u> | <u>78</u> | 1018       | 74        |
| May | 4  | Credit - Mdse. Ret'd,<br>bill 4/18 | 45         | 80        |            |           |
|     | 17 | " - Overcharge,<br>bill 5/5        | 25         | 60        |            |           |
|     | 22 | Cash                               | 250        | 00        |            |           |
|     | 28 | "                                  | <u>150</u> | <u>00</u> | <u>471</u> | <u>40</u> |
|     |    |                                    |            |           | <u>547</u> | <u>34</u> |

BILLS PAST DUE ARE SUBJECT TO SIGHT DRAFT

In accordance with our terms of sale, we will draw at sight on the..... instant for \$....., the amount past due on your account as shown above, unless remittance is received or you make arrangements for an extension.

Herrick-Foster Company

## ILLUSTRATION 23—STATEMENT OF ACCOUNT

- To Parker, Bridget & Co., Pennsylvania Ave. & Ninth St., Washington, D. C.  
Ledger Folio 182.  
For the following charges: May 11, \$212.50; May 20, \$27.46; May 2 \$125.72.
- To Kaufmann & Baer Co., Pittsburgh, Pa., Ledger Folio 89.  
Charges: May 2, \$97.50; May 11, \$125.80; May 17, \$23.15; May 2 \$327.65.  
Credits: May 13, \$97.50; May 16, \$21.30; May 25, \$104.50.
- To Dives, Pomeroy & Stewart Co., Reading, Pa., Ledger Folio 74, amount past due, \$348.46.  
Balance: May 1, \$495.72.

Charges: May 3, \$1722.14; May 14, \$529.90; May 28, \$128.16.

Credits: May 9, \$147.26; May 10, Mdsc. returned, bill 5/3, \$15.72; May 15, \$164.18; May 21, \$1500.00.

Bartlett & Spencer Co., San Francisco, Calif., Ledger Folio 146.

Balance: May 1, \$125.70.

Charges: May 8, \$11.92; May 10, \$925.78; May 20, \$762.40; May 23, \$19.50; May 25, \$415.75.

Credits: May 7, \$125.70; May 20, \$937.70; May 27, overcharge credit, bill 5/20, \$12.26.

Hand your work on assignments 3 and 4 to the manager for checking. The ns will be handed back to you. Place them in your folder.

#### PUNCTUATION AND PARAGRAPHING

Letter 12 is an announcement of one of our annual sales.

**Assignment 5.** Write the letter with carbon to the following:

Strawbridge & Clothier, Philadelphia, Pa.

Hutzler Brothers Co., Baltimore, Md

Carter, Webster & Co., Syracuse, N. Y.

Joel Gutman & Co., Washington, D. C.

#### TRANSCRIBING

If you are in doubt about the spelling of proper names when letters are dictated to you, do not fail to ask. A bad impression is created on the recipient of a letter when his name is misspelled.

**Assignment 6.** Five letters will be dictated to you by the general manager. Transcribe them in the form of the style letter. Present your letters for correction.

#### FILING

**Assignment 7.** File the carbons of the letters and credit memorandums above written by the geographical method.

#### SECRETARIAL PRACTICE

**Assignment 8.** The general manager: "Write Daniel Miller & Co. (page 177) enclosing this credit memorandum. Express regret that the overcharge occurred. This will give you a good opportunity to bring our stock of winter dress goods (see letter 12) to their attention." "Every letter a letter" is the up-to-date correspondent's slogan.

**Assignment 9.** The general manager: "When you send this statement to Daniel Miller & Mathison (see page 178) call their special attention to the amount of the bill which is past due and subject to draft."

ARCHIBALD A WELCH, Vice President  
SILAS H. CORNWELL, Vice President  
WINSLOW RUSSELL  
Vice President and Agency Manager  
HARRY E. JOHNSON, Secretary



RUSSELL L. JONES, Asst. Secretary  
HOWARD GOODWIN, Asst. Secretary  
CHARLES E. JOHNSTON, Asst. Secretary  
ALBERT H. YOST, Assistant Secretary  
HENRY H. KAUFMAN, Actuary

JOHN M. HOLCOMBE, President

**PHOENIX MUTUAL LIFE INSURANCE COMPANY**  
**HARTFORD, CONN.**

ORGANIZED 1881

January 10, 1920.

Babcock Insurance Agency,  
965 Real Estate Trust Bldg.,  
Lakewood, Ohio.

Gentlemen:

The dividend clause of policy #276954, J. K. Brady, provides that during the first fifteen years no dividends shall be payable; but at the end of that time, or on August 27 of this year, the company shall declare a dividend consisting of the surplus for the fifteen years, which can be applied only in uniform reduction of the premiums during the succeeding fifteen years. The contract also provides that the second fifteen-year dividend shall be declared and paid in a lump sum at the end of thirty years.

Even though the first fifteen-year period does not expire until August 15, I think it would be advisable for you to attempt to change this policy now by offering the insured his choice of the following propositions:

- (1) Try to rewrite this policy for a new \$1000 Life or Twenty Payment Life contract dated August 15 of the current year at rated age 52. On such a contract we shall allow a permanent annual reduction of \$12.95 under the Ordinary Life and \$14.84 under the Twenty Payment Life. No medical examination will be required and we shall pay you the full commission.
- (2) If the insured prefers a Life or Twenty Payment Life contract of original date, we shall apply the accumulated dividend of \$88 on the extra amount necessary to convert the policy, which extra charge is \$143.93 on the Ordinary Life and \$309.77 on the Twenty Payment Life. As the extra premium is figured on the net basis, we cannot allow you any commission on the extra premium; but you will of course receive a renewal commission on the larger premiums paid in the future.

If you will inform us which proposition the insured favors, we shall send you the proper papers.

Very truly yours,

PHOENIX MUTUAL LIFE INSURANCE COMPANY

*Howard Goodwin*  
Assistant Secretary

RG  
ROT

## LIFE INSURANCE SECTION

### TECHNICAL TERMS

- Accelerative**—a term applied to an endowment policy, the maturity date of which is “accelerated” or brought forward by allowing the dividends thereon to accumulate in the hands of the company.
- Accumulated dividends**—dividends on a policy which are not withdrawn but allowed to accumulate, thus becoming additions to the value of the policy.
- Actuarial**—of or pertaining to the calculations necessary to determine the valuation of policies, computation of premiums, compilation of tables, etc.
- Administrator**—a person commissioned by a court to take charge of the goods and chattels of one dying without a will. In some jurisdictions his power is extended to real property.
- Anniversary date**—the annually recurring date on which a policy was taken out.
- Annuity**—a periodical payment of money amounting to a fixed sum each year, the money paid being in consideration of premiums previously received.
- Arrears**—failure to pay when due.
- Assignment**—the transfer of a right or an interest in property. A *collateral assignment* is one in which a security or collateral is transferred along with the right or interest.
- Assignees**—persons to whom the property or estate of another is or may be transferred.
- Beneficiary**—the person to whom the value of a policy is payable in case of death of the insured.
- Dividend**—an extra dividend or allowance to holders of insurance policies or shareholders in a joint stock company, taken out of accumulated profits.
- Casualty**—an accident. *Casualty insurance* is insurance against loss from an accident.
- Contingent liabilities**—the obligations of an insurance company which become payable upon designated conditions; i.e., when policies mature or policyholders die.
- Conversion**—the act of changing from one form of policy to another.
- Dependent**—one who looks to another for support.
- Ability**—want of competent power, strength, or physical or mental ability; incapacity.
- Ident**—a sum to be divided as profits among the shareholders of a stock company or persons jointly interested in an enterprise; a proportionate share of such sum.
- Endowment policy**—a policy contract which calls for the payment of a fixed sum at the expiration of a fixed term of years to the insured; or, upon the death of the insured before the end of the term, to the beneficiary.

- executor**—a person appointed by a testator to execute his will; i.e., to see that its provisions are carried into effect.
- extended insurance**—insurance protection equal to the face value of the policy for a specific period without the further payment of premiums; called also *continued term insurance*.
- grace extension**—a period of time (usually thirty days) allowed for the payment of a premium after it is due.
- incontestable**—not admitting of any question; incapable of being canceled. Most policies are *incontestable* for any cause after one year.
- industrial insurance**—insurance for small amounts, the premiums on which are usually paid weekly, as distinguished from *Ordinary* insurance, on which premiums are payable annually, semi-annually, or quarterly.
- insurable**—capable of being insured. An *insurable interest* is a substantial interest which gives one a right to be protected by insurance.
- interim premium**—a premium charged for carrying a policy temporarily through an interval between the specified dates of payment.
- intestate**—having died without leaving a will disposing of one's property or estate.
- invalid (in-val'id)**—having no binding force; void.
- lapsed policy**—a policy on which the holder has neglected to pay premiums and which is consequently no longer in force.
- limited life policy**—a form of policy on which the premiums are to be paid for a limited time only, but with protection provided for throughout the life of the insured.
- maturity**—the due date; the date on which a policy is paid up in full.
- minor**—one who has not attained legal age.
- non-forfeitable**—a term applied to a policy which does not fail because of certain specified conditions.
- non-participating**—not entitled to share in the profits of the company.
- option**—a right or choice.
- paid-up policy**—a contract of insurance upon which the premiums have been paid in full to a certain time, after which they cease to become due and payable.
- policy-holder**—one who holds a policy of insurance.
- premium**—the amount paid to insurance companies as a consideration for a contract of insurance.
- registrar**—an officer of an insurance company who keeps a record of policies issued.
- reinstatement**—the act of putting a policy into force again after it has become lapsed; called also the *revival* of the policy.
- release**—the surrender of a right.
- reserve**—a part of the capital or undivided profits of a company which is retained in order to meet contingencies and is therefore not employed as working capital.
- revocation**—the act of making void.

- er**—a clause added to a policy to cover matters which do not form a part of the policy proper.
- bi-annual**—twice a year.
- death life policy**—a form of policy which provides for the payment of a certain sum to the beneficiary on the death of the insured, on condition that the insured pay the specified premiums at stated intervals during his entire life.
- plus**—the excess of assets after the sum of the capital invested and total liabilities has been deducted from the total assets.
- residual value**—the value which the insurance company will allow on a policy when the payment of premiums is discontinued and the policy is returned.
- survivor**—one who outlives another.
- trusteeship**—the office or duties of a person to whom property or funds have been committed in trust.
- underwriting**—the practice or business of selling insurance, stocks, and bonds.
- waiver**—the intentional surrender of a known right.

## CORRESPONDENCE

1

Geo. M. Wilkinson,  
 Manager, Equitable Life Assurance Co.,<sup>1</sup>  
 363 Watterson Building,  
 Bowling Green, Ky.

Dear Sir:

Applicant—Charles E. Cook  
 Agent—G. P. Cramer

In your letter of November 15 I request that two policies, one for \$1000 and the other for \$1500, be issued on the life of the applicant and that rider clauses be added providing for "Waiver of Premium" and "Monthly Income" in case of total disability.

The examining physician's report states that the applicant has a

serious impairment of vision in his left eye and that his right eye has a slight defect which may become more serious in the future. For this reason we regret to say that we cannot issue the policies with the disability clause, inasmuch as the loss of both eyes, a possibility seemingly not remote, would constitute total disability under the terms of the waiver agreement.

The application, however, has been otherwise approved and the policies will go forward to you in the ordinary course of business. We trust that this change in the application will not prevent the agent from placing the policies.

Yours very truly, (177)

<sup>1</sup> The terms *assurance* and *insurance* are synonymous in this business.

<sup>2</sup> Policies are usually issued from the home office of the company.



2

Mr. Elmer C. Wallace,  
865 Parkview Ave.,  
St. Joseph, Mo.

Dear Sir:

Pursuant to our recent conversation, I enclose semi-annual rates covering a "Beneficiary Degree," together with semi-annual rates for a Twenty-Year Term policy and for an Ordinary Life policy. The Twenty-Year policy is a low flat-rate<sup>3</sup> contract and is guaranteed for twenty years. The Ordinary Life policy is for life. At the end of three years, and each year thereafter, the Ordinary Life policy has a cash surrender value, a paid-up value, and an extended insurance value.

You state that your present age is thirty-five. You could take out a \$1000<sup>100</sup> Ordinary Life policy now and if you so desire could cash in your policy at the end of ten years and receive \$125. At your option we could also issue to you a paid-up policy for \$274; that is, without paying any further premium you would be insured for \$274 as long as you live.

Either the Twenty-Year Term policy or the Ordinary Life is very much superior to the "Beneficiary Degree." While the cost is a trifle higher, the rate is guaranteed during the <sup>200</sup> life of the insured. There are many other privileges not included in the "Beneficiary" plan.

The rates mentioned above are special non-participating rates which

we have recently established, and feel that they are as low as is consistent with safety.

Yours very truly, (245,

3

Mr. David H. Heath,  
953 Highland Ave.,  
Knoxville, Tenn.

Dear Sir:

In re policy # 876549

In reply to your letter of the instant inquiring as to the value of the above policy, I find that the surrender value in cash, including the surrender value of the dividends as well as the current dividend, amounts to \$3765.00, figured as of the 7th instant. Since you closed a remittance for the premium due on that date, which will close the policy in force to October next year, the matter of surrender should be deferred until the date, as it is contrary to our rule to purchase a policy until the end of a period for which premiums have been paid.

We note also your inquiry as to dividends. No extra dividend has been credited since the year which you refer to. At the end of each policy year since 1896 the regular refund, or dividend, has been applied to the purchase of paid-up additional insurance in an amount of \$587.78 now standing to the credit of the policy, the cash surrender value <sup>200</sup> of which is included in the cash value quoted above.

<sup>1</sup> That is, a policy on which the same premium is paid each year.

paid-up additions are exclusive dividend for | this year.

ou do not state your reason for for information as to surrender . If you have any | thought ninating your policy, it is to nterest to inform us as to the e prompting such action | in that we may have an oppor- to submit facts which you weigh carefully before a final n | is reached.

Yours very truly, (285)

4

F. M. Zimmerman,  
52 Manchester St.,  
Lafayette, Ind.

Sir:

We note that you have submitted application for \$5000 additional in- e on the life of | Mr. J. L. on. He wishes to know what be the most advantageous ar- ment for him to make with | : to the disposition of the pro- of this proposed insurance at its ty.

We have carefully studied the in the light of all the circum- s and are of the opinion that 1 of the "Modes of Settle- | at Maturity," as given in the form, is particularly well d<sup>d</sup> to Mr. Branton's case. We t that the | <sup>100</sup> three daughters igned as the beneficiaries in- of the insured's estate, and fr. Branton give formal notice

of | his election of Option 1. The proceeds of the insurance at maturity will be left on deposit with the com- pany | during the lifetime of the beneficiaries, the principal to be paid in case of their death to their legal representatives | or assigns. The company guarantees to pay interest on this deposit at the rate of 3%. If a | higher average annual rate is earned by the company, the amount of this guaranteed income may be increased by an | <sup>200</sup> interest divi- dend.

At the present time, as you know, we allow excess interest equivalent to  $1\frac{1}{4}\%$  | in cases of this kind, which, when added to the 3% guaranteed interest, would make the total | return for this year  $4\frac{1}{4}\%$ .

In our judgment this procedure will meet Mr. Branton's insurance | needs as presented to us. By re- serving the right of revocation,\* the insured may at any time arrange to have | the proceeds paid in some other form if he should so desire.

Yours very truly, (295)

5

Mr. John F. Edwards,  
724 Commonwealth Bldg.,  
Joliet, Illinois.

Dear Sir:

I am in receipt of a letter from Agent J. P. Masters of Binghamton, N. Y., under date | of March 30, en- closing your letter in regard to the cash value offered for the surrender

Can you distinguish accurately between *adapt* and *adopt*?  
That is, the right to change the beneficiary.

of your policy | #967,500. This policy was issued on August 28, 1903, on the Twenty-Year L. | E. A.<sup>6</sup> plan for \$1000. The peculiar feature of this plan is that at the maturity of the | policy the cash value is 150% of the face value, which upon this contract would | <sup>100</sup> amount to \$1500. After the payment of three full annual premiums the policy lapsed for non-payment of the | 1906 premium. In accordance with its terms the policy is being carried under extended insurance for \$1000 | until August 28, 1923. If you are living at that time you will be entitled to a | cash payment of \$50.

If you will consult the provisions in the contract, you will note that when a | policy is carried under extended insurance there is no provision for paying a cash value for a surrender of the | <sup>200</sup> extended insurance. In offering to pay you \$48.42 at this time we are allowing you a | value that is not guaranteed in the policy.

In consulting our records we find that the Prudential Life Insurance Company | did not issue policies of this type in 1903; consequently the policies issued on the lives of your brothers | must have been on different plans and hence contain different values.

I am enclosing a cash value release for | \$48.42, which you will kindly execute and return with your policy to this office before March 28. | <sup>300</sup> If this offer is not ac-

cepted, your policy will continue under extended insurance as explained above.

Yours very truly, | (320)

6

Mr. T. F. Peterson,  
1715 Washington St.,  
Des Moines, Iowa.

Dear Sir:

In re policy #826,973

We have noted carefully the statements made in | your letter of the 4th.

In computing premium charges which must prevail through a long series of years, it is | essential that a life insurance company make a very conservative estimate as to future interest earnings. In computing its premiums | the Mutual Life now assumes that its investments will yield 3% interest on the average; that is, its | policies are based on what is known as the 3% reserve standard. The company to which you refer | <sup>100</sup> bases its premiums on an assumed interest rate of 3½%. As a matter of fact | both companies expect to earn a higher rate. Both are on a participating<sup>7</sup> basis, which in effect means that at | the end of each policy year the unused part of the premiums for that year is refunded together with excess | interest earnings. It follows therefore that the return in the case of a policy issued on the 3% | reserve basis should be better, as regards the ex-

<sup>6</sup> Limited Endowment Annuity.

<sup>7</sup> See the definition of *non-participating* on page 182.

interest feature of the dividend, extent of one-half <sup>200</sup> of 1% accumulated reserve than in the case of a policy issued on the 3½% basis.

The point we are making is that the premium rates quoted by the company you mention are lower than they are calculated on a different basis. The excess interest part of the dividend in the case of the Life policy provides for an increase on account of interest rates over 3%, whereas in the case of the other company the allowance would only be on interest earned in excess of 3½%; <sup>300</sup> consequently the final net cost is not greater than the case of our policy even though the premium rates are apparently higher.

Yours truly, (329)

7

T. Brush,  
55 Beacom St.,  
Montreal, Canada.  
Sir:

In re policy #42765 we acknowledge your letter of the 14th instant. Through an inadvertence you gave the number of the policy as #47265, and some of the charges necessarily consumed in issuing the contract to which the letter relates.

The policy in question commences its twenty-year accumulation on September 4 of last year. At that time you were offered a number of options in settlement, but it

was oversight.

does not appear that you have as yet made a selection. In consequence, we automatically set up at interest <sup>100</sup> the dividend of \$25.26 apportioned to the policy as of that date. This dividend with interest, together with the excess interest bonus, amounts at the present time to \$29.42. You may withdraw this sum, continuing the policy as paid up under its own terms for its face value of \$2000, allowing the loan of \$700 to remain as a lien against the paid-up policy, provided the interest on the loan is paid as explained in our letter of September 30. Dividends will be apportioned on <sup>200</sup> the paid-up policy annually under the terms and conditions applying to all policies similarly drawn. The dividend for this year amounts to \$26.93.

On the maturity of the policy we offered you the cash surrender value less the loan, which, including the reserve and dividend, amounted to \$1426.93 at that time. With the addition of the interest on the deferred dividend, the excess interest bonus, and the current dividend, the cash value on this date amounts to \$1458.61, and you <sup>300</sup> may surrender the policy for this sum less the accumulated interest on the loan.

As we would like to make a final adjustment on this policy, please let us know by return mail which settlement you wish us to make.

Yours very truly, (343)

8

Mr. R. E. Emery,  
District Agent,<sup>9</sup>  
Jackson, Mich.

Dear Sir:

We have your letter of April 26 enclosing policy #725,468 in the amount of \$1000, issued in the name of Alexander J. Simmons. By the terms of the policy the amount of insurance is payable to the executors, administrators,<sup>10</sup> or assigns of the insured.

We are frequently requested by beneficiaries of policies to dispense with the expenses of administration and make payment to the legal heirs<sup>11</sup> of the insured. In some instances we have had reason to believe that such requests were made for the purpose of avoiding the<sup>100</sup> payment of an inheritance tax or to avoid the payment of some of the insured's outstanding debts. In this particular case we are convinced that the parties in interest are not attempting to avoid any expenses or liabilities except the cost of administration. In view of the amount involved, however, we feel that it would not be sound business policy to make a settlement directly in favor of the heirs.

We are aware of the unusual circumstances in this case. Should

we comply with such requests, however, we would probably have difficulty sooner or later with some of the creditors<sup>1200</sup> of our policy-holders. After making payment to the heirs of the insured our defense<sup>12</sup> against creditors' claims would not be a very strong one.

It is our belief that although the heirs of the insured might supply us with an affidavit executed in the best of faith to the effect that all of the insured's debts had been fully paid and that there were no outstanding obligations, it might happen that liabilities exist of which the heirs at the time of signing the affidavit had no knowledge. If such circumstances should arise after the company has paid the full<sup>1200</sup> proceeds of the policy to the heirs of the insured, the company's release might not be considered incontestable. In the settlement of claims involving small amounts, we have always made such payments after first securing an affidavit to the effect that the deceased had died intestate, that all the just debts had been paid, and that no administrator had been appointed for the estate. When there is a considerable amount of money involved, however, we are obliged to insist that payment be made to an administrator.

Yours truly, (388)

<sup>9</sup> Why is the name of the company not given in the address?

<sup>10</sup> What do the words *executrix* and *administratrix* mean?

<sup>11</sup> That is, those who inherit the property.

<sup>12</sup> Also correctly spelled *defence*.

9

ary H. Melrose,  
 nager, Phoenix Life Insur-  
 ance Co.,  
 965 Hub Building,  
 Portland, Me.

r:

#437291—Harper<sup>13</sup>

have your opinion of the  
 which the company | has  
 necessary to pursue in regard  
 tatement cases under present  
 ns as expressed in your letter  
 gust 28. It gives us the  
 nity of presenting the point  
 of the officers of the com-  
 in such a way that you may  
 difficulties which we have to  
 ie in handling these cases  
 all over the country.

you know, our rules for re-  
 ave been exceedingly liberal  
 have in the |<sup>100</sup> past been  
 in requiring absolute adher-  
 these rules. The reason for  
 that when only the question |  
 ealth of the insured was con-  
 we could feel perfectly safe in  
 ases in taking a personal |  
 nt from the agent or from any  
 ble person acquainted with  
 red.

w, however, we are faced  
 | peculiar situation and, as  
 ized by Mr. Miles in several  
 copies of which you have re-  
 it is necessary | to request  
 ne of our men to co-operate

with us by conforming strictly to the  
 rules laid down |<sup>200</sup> for the accept-  
 ance of premiums which are past due.

As it appears to the managers  
 and agents, practically every case |  
 has peculiar conditions that make it  
 exceptional and open to special  
 treatment by the company. If you  
 were in our | position, however,  
 fully cognizant of our responsibility  
 to the other officers, the agents, and  
 the policy-holders of the company |  
 for the underwriting of these risks,  
 and had these questions with their  
 varying and peculiar conditions come  
 to you for | decision, you would feel  
 as we do that no peculiar condition  
 presented in any special case gives  
 us the right |<sup>300</sup> to deviate from the  
 strict rule.

In this particular instance we  
 believe that we cannot present the  
 case any more | emphatically than  
 it is stated in our letter of August 17.  
 We feel that it is not proper to con-  
 sider | the home office bound by any  
 agreement between the agent and the  
 insured relative to a scheme for the  
 payment | of premiums under a  
 policy, because just as soon as we  
 begin to make exceptions we are in  
 danger of | favoring some policy-  
 holders to the disadvantage of others.  
 We regret that it is impossible for  
 us to change our |<sup>400</sup> decision not to  
 sanction the reinstatement of the  
 policy in question under the terms  
 proposed.

Yours very truly, (418)

10

Mr. L. C. Regan,  
 Manager, Great Western Life  
 Insurance Co.,  
 423 Call Building, San Fran-  
 cisco, Calif.

Dear Sir:

# 237654—B. C. Albright

Your letter of July 3 with refer-  
 ence to the above policy has been  
 referred to this department for reply.  
 We have checked up the values  
 which have been quoted and have  
 found them to be correct.

You will note from the corre-  
 spondence we enclose that under date  
 of May 9 you were informed that  
 the cash value of policy # 237654  
 was \$2166.79 figured as of May 7.  
 This value was based on the assump-  
 tion that the premium then due  
 had not been paid. Furthermore,  
 you will observe that the dividend  
 additions of \$606.79 were included.  
 These additions have since been sur-  
 rendered to the policy-holder and  
 when deducted from the cash value  
 will leave a balance of \$1560, which  
 will check the value quoted in our  
 letter of May 20.

On May 26 the insured paid a  
 premium of \$670.20. On June 4 at  
 your request we quoted a value of  
 \$1891.50, which represents a  
 net increase of \$331.50. If you will  
 compare the fifth-year value of  
 \$1560 guaranteed in the policy with  
 the sixth-year value of \$1940, you  
 will see that even at the end of the

year the net increase is only \$380, or  
 slightly over one-half of the amount  
 of the premium paid. This is due to  
 the fact that the value of the policy  
 is based on the reserves, which are in  
 turn dependent upon the net pre-  
 miums that have been paid. The insured,  
 however, pays us a gross  
 premium which includes a loading to  
 cover certain expenses; therefore, a  
 comparison between the amount of  
 the gross premium that has been paid  
 and the subsequent increase in value  
 which is indirectly based on the  
 net premium would not give a valid  
 result from an actuarial viewpoint.

Furthermore, the guaranteed  
 values of all policies are figured at  
 the end of the policy year, and that is  
 therefore the most favorable time for  
 a policy-holder to surrender his  
 contract. During the fully paid  
 policy year it is the rule of the com-  
 pany to allow a cash value,  
 which is the guaranteed terminal  
 value discounted to the date of sur-  
 render at the rate on which the  
 policy is based. In this case the rate  
 is 3%, and in obtaining the value  
 quoted in our letter of December 10  
 we discounted the sixth-year value of  
 \$1940 for eight months. This dis-  
 count amounted to \$48.50, leaving  
 the net value of the policy \$1891.50.

We hope we have made our  
 point clear, but if we have not done  
 so we shall be pleased to con-  
 tinue the correspondence until all  
 questions are satisfactorily answered.

Yours very truly, (515)

11

agents:<sup>14</sup>

The Mutual Protective policy, the waiver of premium benefits, is more readily adapted to meet varying requirements of pros- and conditions arising after as are issued than any other of insurance. Aside from its | l features, it offers almost all dvantages of an Ordinary Life r at a rate considerably under charged | for the latter form of act.

to the young man between y and thirty it should be par- rly attractive. The | more de- e risks among men of this class y have families dependent them, which makes it advisable rry | <sup>100</sup> the largest amount of nce possible. On the other their incomes generally are not ent to enable them to | carry mount of insurance which their nsibilities demand. These men fore require cheap but sound nce. Ordinarily they are | lim- in their choice to an Ordinary contract or a Term contract, i usually does not extend beyond r | years. Experience has dem- ated that a Term contract, when it runs for thirty years, is ntirely satisfactory, especially | taken out at the lower ages. s it is converted, it expires the insured is still young; | <sup>200</sup> although he has received in full there is likely to be an

element of disappointment when he finds his | insurance running out at a time when he is probably uninsur- able and still needs a certain amount of protection.

Our | Protective policy falls in a class between the Ordinary Life and the Thirty-Year Term policy. It is cheaper than | the Ordinary Life policy and is consequently better adapted to the means of the class of men mentioned. On the | other hand it will not expire when the in- sured are still far from being old men; it will be in | <sup>200</sup> full force during all the years when they are likely to require a considerable amount of insurance. It does not | expire until after the period during which insurance is exceedingly im- portant, and then, instead of being discontinued immediately, it is | kept in force on a graduated declin- ing scale so that the policy-holder is insured until he reaches the age | of seventy-nine. This contract usually matures as a death claim for those who select it, even though no conver- sion | is made to a more expensive form of policy.

The Protective policy has an- other feature, however, which is im- portant for | <sup>400</sup> such men. If they become prosperous enough to carry better insurance, this contract can be converted with less trouble than | the Ordinary Term contract. There is no need for paying a large additional premium in order to convert it to | a new contract of the same kind and

<sup>14</sup> This is a general letter to agents.



original date, nor is there any necessity for changing it to a new policy at a higher premium made necessary by the advanced age of the insured. When the time arrives that the insured feels that he is able to carry more insurance, he need only make payments at convenient periods into the Premium Deposit Fund, and the conversion will be taken care of gradually and automatically. He does not contract with the company to pay an increased premium at fixed dates as he would do if he were converting a Term policy to a new contract of advanced date and rating, and thereby increase the chances of lapsing the policy if he finds at some future date that he is unable to meet the increased payments.

For instance, if he has a \$5,000 policy, he can figure on making such payments into the fund as will ultimately convert it into a \$5,000 Paid-up Life policy. If on the other hand he will need only \$3,000 of insurance after he reaches the age of seventy, he can plan to pay into the fund only the amount necessary to buy that much paid-up insurance. Without making any change in the terms of the contract and simply by making regular payments, he can vary the amount of paid-up insurance to which he will eventually be entitled at the age of seventy to meet any situation that may present itself.

Moreover, until the point is reached where there are suffi-

cient deposits in the Deposit Fund to make the policy either fully paid as a Protective policy or to convert it into a Paid-up Life policy, the fund remains to the credit of the policy and is paid with the policy as a death claim. In other words during the early years of a policy like this, if deposits are made in the fund, the insured is not only providing life insurance for his family, but is also laying away in a savings bank a small little sum which will be payable to his dependents if the policy becomes a claim. This sum of course cannot be withdrawn; but that is an advantage to the beneficiaries, because we all know how easy it is to persuade ourselves, on the slightest provocation, to draw on the savings which we have put away to provide for future needs.

Furthermore, while this sum on deposit will ultimately be automatically used to convert the policy, the conversion will probably not take place in the early years unless the deposits are unusually large; and when it does take place, the responsibilities of the insured to his family will probably not be as great as they were during the first years of the policy.

No account has been taken in the foregoing of the usual accelerative provision which is incorporated in this contract. If the dividends under a Protective policy are allowed to accumulate, they will go far towards eventually making it a Paid-up Life policy. Indeed, at the lower ages

is reason to believe that they are sufficient to convert it into up Life insurance for the amount insured.

Finally, for a slight additional the insured can also have a in the policy that will insure that if for any reason he becomes permanently disabled, the will be carried on for the benefit of his family.

In the foregoing the Protective has been considered chiefly as relates to the younger ages. The stages set forth, however, will be in only a slightly less degree policy-holders who insure at the younger ages. Considered from every point it is a contract of great utility, and should commend itself to those who are primarily in need of essential protection, but who have a right to feel that at some future time they may desire a more extensive and permanent form of insurance. (1109)

## 12

and onward by the momentum created during twelve months of undented success those who serve the company in the field and in the future will cross into another year with a swinging stride and confident eagerness to seize the abounding promise of the new year all indications are in the highest degree encouraging conditions throughout the country reflect great general prosperity the demand for life insurance never greater and the attractive

and liberal provisions of our contracts were never so widely known and appreciated the applying of millions of dollars in the form of premium credits through the intelligent work of the field staff has brought many expressions of gratification from our policy-holders these favorable circumstances will operate as wonderful aids in bringing new business to our books and at the same time will serve as powerful influences in holding solidly the existing insurance we are therefore fully justified in again planning for a substantial growth in the amount of business to be written during the coming year we ask you to plan for at least 60% of your allotments by the end of June while for convenience the Ordinary allotment has again been stated in terms of net new business we desire to impress upon you the importance of conservation of Ordinary for in reviewing the results we shall continue to place emphasis on the retention of existing contracts as well as on the item of increase these annual allotments have come to be regarded not as the maximum to be obtained but as a fair guide by which the district record may be judged the proportionate allotment from week to week may properly be considered a line of demarcation above which are to be found those districts that are succeeding and the measure of their success is shown in the amount by which the allotment figure is exceeded each manager assistant and agent will be looked to for his reasonable share of

the district requirement each member of the staff should have your constant supervision advice and encouragement in order that he may measure up fully to desirable standards in all details of his record we have every confidence that you and

your staff will secure your quota of new business and that you will also continue to do your part in retaining the esteem and good-will of policyholders by giving business-like service yours very truly

### OFFICE TRAINING ASSIGNMENTS

In this section you are stenographer to the supervisor of agencies in the home office of the Phoenix Mutual Life Insurance Co., Hartford, Conn.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

Study the arrangement of the style letter. The first line of each paragraph is written flush with the margin, and the other lines begin five spaces from the margin. Use this form in this section.

**Assignment 1.** Copy the style letter with carbon on form 26.

**Assignment 2.** Copy letters 6 and 8 on letterheads. Submit the three letters for signature.

#### ANNUAL STATEMENT

A part of the annual statement of our company for the current year showing receipts and expenditures is given below.

**Assignment 3.** Copy the statement with carbon. *Check your work carefully.*

74th Annual Statement  
The Phoenix Mutual Life Insurance Company  
Hartford, Conn.

#### Receipts

|  |                 |
|--|-----------------|
| Premiums.....  | \$34,671,225.16 |
| Premiums guaranteed under Soldiers and Sailors Civil Relief Act..... | 2,760.67        |
| Interest.....  | 10,702,519.33   |
| Rents.....   | 110,865.64      |
| Profit on Sales of Real Estate.....                                  | 374.90          |

|  |                  |
|--|------------------|
| Profit on Sales or Exchange of Bonds.....                      | \$8,150.00       |
| Accrual of Discount on Bonds.....                              | 449.74           |
| Borrowed Money—Obligations, Account Liberty Loan<br>Bonds..... | 14,850,000.00    |
| <hr/>  |                  |
| Total Receipts.....  | \$60,346,345.44  |
| Supplementary Policy Claims.....                               | 1,165,128.70     |
| Balance, January 1, 1919.....                                  | 214,808,596.65   |
| <hr/>  |                  |
|  | \$276,320,070.79 |

## Expenditures

|   |                  |
|---|------------------|
| Death Claims.....                                     | \$12,154,380.46  |
| Endowments.....                                       | 2,120,952.22     |
| Annuities.....  | 130,014.83       |
| Surrendered Policies.....                             | 3,365,350.47     |
| Dividends and Returned Premiums ...                   | 6,906,755.14     |
| <hr/>   |                  |
| Total Paid Policy-holders .....                       | \$24,677,453.12  |
| Taxes on Real Estate.....                             | \$93,242.73      |
| Other Taxes, Fees, and Licenses.....                  | 825,659.33       |
| Real Estate Expenses.....                             | 48,173.56        |
| Mortgage Loan Expenses.....                           | 34,134.29        |
| Medical Expenses.....                                 | 181,033.18       |
| Legal Expenses.....                                   | 44,028.90        |
| Commissions and Agency Expenses...                    | 3,633,249.36     |
| Office Expenses including Salaries....                | 760,565.12       |
| Advertising, Stationery, Printing and<br>Postage..... | 136,162.48       |
| Red Cross and other War Relief Funds.                 | 54,500.00        |
| <hr/>   |                  |
| Total Expenses and Taxes.....                         | 5,810,748.95     |
| Reduction in Book Value of Real Estate.....           | 60,900.05        |
| Premiums on Bonds Purchased.....                      | 4,600.00         |
| Loss on Sales of Real Estate.....                     | 2,800.00         |
| <hr/>   |                  |
| Total Expenditures.....                               | \$30,556,502.12  |
| Supplementary Policy Claims.....                      | 798,832.65       |
| Balance, January 1, 1920.....                         | 244,964,736.02   |
| <hr/>   |                  |
|   | \$276,320,070.79 |

## AGENT'S REPORT

**Assignment 4.** Make a copy of the following report received from one of our agents.

## REPORT OF NEW BUSINESS

July, 1919

John A. Larkins, Agent, Phoenixville, Pa.

## ORDINARY

| Date   | Policy No. | Amount of Policy | Rate of Premium | Amount of Premium |          |
|--------|------------|------------------|-----------------|-------------------|----------|
| July 1 | 40,620     | \$3,000          | \$1.55          | \$46.50           |          |
| " 10   | 121,376    | 5,000            | 1.45            | 72.50             |          |
| " 12   | 35,840     | 2,000            | 1.25            | 25.00             |          |
| " 18   | 175,258    | 10,000           | 1.84½           | 184.50            |          |
| " 19   | 28,104     | 300              | 1.60            | 4.80              |          |
| " 22   | 347,598    | 15,000           | .75             | 112.50            |          |
| " 25   | 31,101     | 9,500            | .90             | 85.50             | \$531.30 |

## INDUSTRIAL

| Date   | Policy No. | Amount of Policy | Rate of Premium | Amount of Premium |        |
|--------|------------|------------------|-----------------|-------------------|--------|
| July 2 | 3,356      | \$600            | \$2.62          | \$15.72           |        |
| " 7    | 5,348      | 1,750            | 1.08            | 18.90             |        |
| " 13   | 7,654      | 2,900            | .88             | 25.52             |        |
| " 14   | 11,256     | 1,000            | .45             | 4.50              |        |
| " 15   | 102,943    | 5,000            | .37½            | 18.75             |        |
| " 19   | 25,146     | 12,500           | .83½            | 104.06            |        |
| " 27   | 103,141    | 3,750            | 1.10            | 41.25             |        |
| " 29   | 1,432      | 2,500            | .57½            | 14.38             | 243.08 |

Total premiums on insurance written during July, 1919. \$774.38

## TECHNICAL COPY

**Assignment 5.** Copy the following passages from the company's annual report:

Our surplus, when our securities are taken at the value ascertained according to the State Insurance Departments, is \$6,269,292.74. This

as a valuation adopted by the Insurance Departments throughout the country to meet the great depression in market values caused by the war.

Although not called for, we have computed our surplus also on the actual market values of December 31, 1918, involving also the depression in the market price of Liberty Loan Bonds, and we find our surplus on that stringent test to be \$2,916,012.54. We do not, however, sell our bonds, and their earning power and stability are as satisfactory as ever. We do not have to realize on the depressed values, the inflow of cash being always more than sufficient to meet all demands, and the depression in values in no way reflects on our selection or the superiority of our securities.

Our assets have increased from \$221,981,720.83, January 1, 1918, to \$252,837,435.24, January 1, 1919, or in the sum of \$30,855,714.41.

|   |                 |
|---|-----------------|
| This increase appears approximately in the increase             |                 |
| United States Bonds and other bonds.....                        | \$34,018,949.74 |
| and the decrease in our bonds and mortgages on real estate..... | 3,255,500.00    |

This statement of assets contains, however, \$14,850,000 to be paid for in the purchase of the Fourth Liberty Loan Bonds.

This leaves \$15,306,139.37 normal excess of income over disbursements.

|   |                 |
|---|-----------------|
| The total income in 1918 exceeded the disbursements by.....                                 | \$30,156,139.37 |
| the interest due and accrued and the net deferred and unreported premiums increased by..... | 699,575.04      |

|  |                 |
|--|-----------------|
| the total of.....                      | \$30,855,714.41 |
| less the increase in the total assets. |                 |

|  |              |
|--|--------------|
| less the mortality of the year 1918 was much above the normal, due to the epidemic and war losses, the Suspended Mortality Fund was automatically reduced by the sum of..... | 1,734,916.00 |
|--|--------------|

|                   |                 |
|-------------------|-----------------|
| the total of..... | \$32,590,630.41 |
|-------------------|-----------------|

presents the increase in the following liability items during the year:

|  |                 |
|--|-----------------|
| In Policy Reserves.....  | \$15,001,600.00 |
| In Proceeds of Income Policies left with the Company...  | 531,719.00      |
| In Policy Claims in process of adjustment and unrepresented and contingent claims.....           | 682,017.29      |
| In borrowed Money—Obligations on account of Liberty Loan Bonds and accrued interest thereon..... | 14,986,820.49   |
| In other Liabilities, including dividends to policyholders.....                                  | 851,514.39      |
| In Contingency Reserve Funds other than Suspended Mortality Fund.....                            | 536,959.24      |
|  | <hr/>           |
|  | \$32,590,630.41 |

Exclusive of Reserves, the actual losses incurred in 1918 were 86.02 per cent. of the expected losses. Of this 86.02 per cent., deaths believed to be due to influenza amounted to 18.80 per cent., and the other deaths, including war losses, to 67.22 per cent.

We state herewith certain percentages of the business which show a very wholesome condition. Loans on policies, surrender of policies, term business and conversion of the latter into a more permanent form of insurance all show a very satisfactory trend.

Expenses and taxes in 1918 were 12.77 per cent. of the total income, exclusive of borrowed money and supplementary policy claims—a very satisfactory figure in view of increased taxes and cost of operation.

The insurance voluntarily relinquished during 1918 (lapsed, surrendered, extended, canceled, and reduced) was 2.8 per cent. of the insurance in force at the beginning of the year.

The insurance surrendered during 1918 was one per cent. of the insurance in force at the beginning of the year.

The insurance written in 1918 was \$128,020,555.00, and together with reinstated and increased insurance amounted to \$128,474,102.00, making our outstanding insurance \$993,748,480.00.

The increase in insurance in force on a written basis was \$73,474,045.00, being 57.2 per cent. of the total insurance written. On a paid-for basis, the increase was \$72,184,365.00, being 63.8 per cent. of the total new insurance paid for.

Five-Year Term Policies were 3.7 per cent. of the total issued during 1918; \$3,113,330.00 of Convertible Five-Year Term Policies were converted to a more permanent form of insurance during the year 1918.

Our mortgage loans have paid their interest so that we may say there really none in default; and of our railroad bonds none have failed during the two systems which were in default last year, and are still in reorganization.

We have charged off \$60,900 of the cost of our Home Office buildings, \$4,600 premiums on bonds purchased during the year.

The Company has adopted for the year 1919 the very liberal scale for its dividends it has maintained since 1915, although in addition to increased taxes and cost of operation the Company has had, with other insurance companies, the trying experience of the war and the epidemic. We have appropriated for the dividend of 1919, \$7,570,071.72.

## ALPHABETIZING

The following list contains the names of the provinces in Canada with the important cities and towns in each.

|             |                          |               |                                 |
|-------------|--------------------------|---------------|---------------------------------|
|             | Alberta (Alta.)          |               | Prince Edward Island (P. E. I.) |
| Edmonton    | Calgary                  | Charlottetown | Georgetown                      |
|             | Manitoba (Man.)          |               | Quebec (Que.)                   |
| Winnipeg    | Winnipeg                 | St. Cunegonde | Chicoutimi                      |
|             | Ontario (Ont.)           | Beauport      | Woodstock                       |
| Collingwood | Collingwood              | Westmount     | Barrie                          |
| Dover       | Kingston                 | Three Rivers  | Arnprior                        |
| Orton       | Owen Sound               | Levis         | St. Thomas                      |
| Sarnia      | Lindsay                  | Sorel         | Galt                            |
| London      | Cornwall                 | White End     | Ottawa                          |
| Hamilton    | Kenova                   | St. Flavien   | Guelph                          |
|             | Smith's Falls            | Montreal      | Brantford                       |
|             | British Columbia (B. C.) |               | Newfoundland                    |
| Victoria    | Nelson                   | St. John's    | Placentia                       |
|             | Roseland                 |               | Saskatchewan (Sask.)            |
| Westminster | Vancouver                | Regina        | Moose Jaw                       |
|             | Nova Scotia (N. S.)      | Hull          | Lachine                         |
| Halifax     | Truro                    | Isle Verte    | Hochelega                       |
| Halifax     | Springhill               | Salaberry de  | Battleford                      |
| Halifax     | Windsor                  | Valleyfield   |                                 |
|             | New Brunswick (N. B.)    |               | Yukon Territory (Yukon)         |
| Fredericton | Fredericton              | Dawson City   | Pennington                      |



**Assignment 6.** Arrange the names of the cities and towns in each province in alphabetical order. Make a typewritten copy of the entire list with carbon.

#### PUNCTUATION AND PARAGRAPHING

**Assignment 7.** After studying letter 12 write copies with carbons to the following district agents:

Mr. I. F. Corbett, Commonwealth Building, Chattanooga, Tenn.

Mr. Charles J. Andrews, 432 West 44th Street, Boston, Mass.

Mr. A. R. Haskins, 2426 N. Morton St., St. Louis, Mo.

#### TRANSCRIBING

**Assignment 8.** Transcribe the five letters which will be dictated to you.

#### FILING

**Assignment 9.** File all the correspondence geographically.

#### SECRETARIAL PRACTICE

The trained secretary knows where to turn for any information that may be wanted. Not only is he familiar with the ordinary office reference books (discussed on page 125), but he knows where to find and how to use other more specialized reference works. His chief may be writing a report or a speech and may ask the secretary to verify certain statements or statistics; or he may ask the secretary to obtain the data for a talk on a certain subject. Occasionally reference to an encyclopedia may answer the purpose. When current information is wanted it is usually to be found in magazines rather than books. In practically every library there is to be found a publication entitled "Readers' Guide to Periodical Literature." This "Guide" offers the most serviceable method of obtaining magazine references to current subjects. The "World's Almanac" contains much statistical and miscellaneous information. "Who's Who" gives brief biographies of prominent men and women.

**Assignment 10.** Get the names of the leading magazines devoted to business (other than trade journals). Write to those which you think will be worth your while, ordering a year's subscription.

**Assignment 11.** Your chief: "Write Larkins (see page 196) urging him to pay more attention to our Protective Policy. Read again our letter to agents on the subject (No. 11) and point out to Mr. Larkins as concisely as possible the specific advantage to young men of this form of policy. You might send him 500

copies of the pamphlet, 'Increased Responsibility—Increased Protection,' which describes the policy."

**Assignment 12.** Your chief has given you the following data which he asks you to put into the form of a letter to Mr. R. E. Hall, our agent at Norristown, Pa. (Mr. Hall wrote us about a policy-holder, James M. Norton, who had allowed his policy No. 682421 to lapse. He now wishes to reinstate the policy and has given his check for the amount of the premium due to Mr. Hall.)

"Policy of company to insist rigidly on terms of contract. Responsibility to other policy-holders involved. Any agreement between you and insured does not bind company. Cannot accept premium unless insured passes physical examination. Send Form A-622."

**Assignment 13.** Your chief: "This morning I see there's a letter from the Civic Forum asking me to address their convention at Philadelphia on the 15th of next month on the subject, 'Life Insurance—A Profession.' I have to be in Chicago on that date to attend a convention of our district agents. I wish you would write them a nice letter expressing my appreciation of their interest and my deep regret that this previous engagement makes it impossible for me to be present." Their address is 142 W. 42d St., New York City, and the letter was signed by J. W. Falken, Executive Secretary.

**Assignment 14.** Your chief: "Write the Williams & Wilkins Co. enclosing a copy of the annual statement you copied (page 194). Ask them to quote us on 10,000 copies printed on good stock. Better ask them to show us a sample of the stock they propose to use with their quotation."

**Assignment 15.** Your chief: "Get the letter I dictated to Mr. Edwards of Joliet (letter 5). Wire Masters and tell him that Mr. Edwards has not returned the cash value release form which we sent him. Ask him to call on Edwards and try to get him to sign the form." Mr. Masters' address is 406 Commonwealth Building, Joliet.

# Pacific Oil Company

Incorporated in California

CHESTNUT AND SWANSON STREETS

Your File: Pa 242

March  
San Francisco, Calif. Twenty-second  
1920

Attention: Mr. C. J. Kenyon  
Assistant Chief Engineer

Hudson Motor Car Company  
Detroit, Michigan

Gentlemen:

We have your letter of the 29th ultimo in regard to the cold tests you have been making of the sample oils we submitted, and have carefully noted your comments.

A zero cold test may be considered an advantage by some on account of handling conditions for a few months during the winter, but as Pennsylvania oils are made from a paraffine base crude, it is impossible to extract from them all or enough of the paraffine wax they contain so that they will flow at a lower temperature than 20 to 25° above zero. However, this temperature is low enough for all practical purposes as the oil supply may be kept in a warm place. The heat of the engine, as soon as it is started, is sufficient to keep the oil in the crank-case or lubricator limpid enough to flow no matter what the outside temperature may be.

Western or asphalt base crudes are the only ones from which oils that will flow around zero temperature can be made. While the products made from these crudes are low in cold test, they have low gravities containing excesses of carbon and are low in flash and fire tests, making them deficient in lubricating qualities. They lose their viscosities rapidly under heat and must be acid treated. To use zero cold test oils, therefore, is to sacrifice all of the vitally essential qualities which are only obtainable in Pennsylvania crudes.

Yours very truly,

PACIFIC OIL COMPANY.

By *R. C. Stevens*  
Chief Chemist

RCS-EO

## OIL AND OIL REFINING SECTION

### TECHNICAL TERMS

- asion**—the act or result of wearing or rubbing off by friction.
- lterate**—to debase or deteriorate by mixing with foreign or baser materials.
- tator**—a machine for mixing oils.
- monia**—the modern name for a volatile, pungent, colorless, alkali gas.
- lysis**—the separation of anything into its elements; as, the *analysis* of crude petroleum.
- mize**—to reduce to very small particles; as, to spray a liquid.
- ach**—to lighten in color and make clearer by means of filtering or with chemicals.
- product**—something produced in the process of manufacture in addition to the principal product.
- bonization**—the act of converting into carbon by combustion or the action of fire.
- ride**—a compound of chlorine with another element.
- rine**—a greenish yellow gas possessing great bleaching powers.
- geal**—to freeze.
- ode**—to eat, wear, or waste away gradually.
- le oil**—oil in its natural, raw, and unprepared state.
- mpose**—to resolve anything, as oil, into its elements.
- riorate**—to reduce in quality.
- illation**—the process of purifying crude oil. The product of distillation is called a *distillate*.
- lsify**—to thicken into globules as a result of being mixed or used over and over.
- oration**—the act of resolving into vapor.
- ation**—the process of purifying by passing through any cleaning liquid.
- ing point**—the temperature at which escaping vapor will ignite momentarily or “flash.” This is called the “flash test” of oil.
- lity**—the quality of being fluid or capable of flowing.
- ion**—the rubbing of the surface of one body against that of another.
- r's earth**—a substance used in filtering oil.
- ous**—of the nature of gas.
- ule**—a small spherical particle.
- ogeneous**—of the same kind; composed of similar parts or elements.
- rogen**—one of the elementary substances existing as an odorless gas.
- inant**—an oil prepared for lighting purposes.
- icant**—any natural or artificial material used between bearing surfaces to reduce friction.

- lubricator**—any device for keeping the rubbing parts of machines, bearings, etc., supplied with oil or grease to diminish friction.
- orifice**—an opening or mouth.
- oscillatory**—moving backward and forward.
- paraffin**—a white waxy substance obtained from petroleum by distillation and used as a lubricant and for other purposes.
- petroleum**—mineral oil in the natural state.
- precipitate**—to reduce from a state of solution to a solid form and cause to fall to the bottom of a liquid.
- pungent**—piercing; keen (applied to an odor).
- quenching oil**—oil used for immersing heated steel in order to temper it.
- rapeseed**—the seed of a plant called rape, from which linseed oil is made.
- refinery**—a place where some substance, as petroleum, is refined; i. e., freed from impurities and brought to a pure state.
- reservoir**—a large receptacle for storing oil.
- residue**—that which is left after any process such as refining.
- rotary**—turning on an axis.
- sediment**—matter which settles to the bottom of any liquid.
- still**—an apparatus for distilling liquids.
- thermal-conductivity**—the property of transmitting or distributing heat.
- volatilize**—to cause to evaporate or pass off as vapor or gas. Substances having this property are said to be *volatile*.

## CORRESPONDENCE

1

Moran Construction Company,  
Builders' Exchange,  
Newport News, Va.

Gentlemen:

"PAINTOLEUM"—What is it?

First: It is an excellent substitute for linseed oil, when mixed with dry paint and | a little dryer, for painting rough board surfaces, barns, fences, and shingle roofs. It is not recommended for use on | tin roofs.

Second: When mixed with linseed oil in the proportion of 20%, it cannot be detected and | does not in the least detract from the usual properties of pure linseed.

Third: It has been on the market | for seventeen years and the sale of it has increased immensely; therefore it is no experiment. We have spared no |<sup>100</sup> expense and labor in improving its quality, and it is better today<sup>2</sup> than when first manufactured.

<sup>1</sup> The modern tendency is to omit the apostrophe in such instances. Other examples: Farmers National Bank, Merchants and Miners Transportation Company.

<sup>2</sup> In the interests of simplicity the hyphen should be omitted in the words *today* and *tomorrow*.

- Fourth: A trial will | convince you that this oil is all we claim for it, and that its use will put dollars in your | pocket.
- Fifth: Most of the linseed oil offered at less than the regular prices is adulterated. Buy your linseed pure | and mix it yourself.
- Sixth: Paintoleum, either raw or boiled, is put up in barrels and half-barrels, five and | ten-gallon lithographed<sup>3</sup> cans, and is low in price. Write for quotations, and state in what quantity you would probably |<sup>200</sup> buy.
- Yours very truly, (204)

2

Mr. C. W. Andrews,  
Supt., Holland Valve Co.,  
Holland, Mich.

Dear Sir:

We have read your letter of June 24 carefully.

We do not believe that you would find | paraffin oils at all satisfactory for your purpose. They are not distilled direct from crude petroleum, but are distilled from | petroleum tar. Furthermore, they are not still-sweetened, and their colors are secured by artificial means instead of by natural | processes of filtration.

<sup>3</sup> See definition on page 149.

<sup>4</sup> A kind of charcoal.

<sup>5</sup> Pronounced *būz*.

Practically all paraffin oils are chemically treated with acid and caustic soda, and therefore they are not | equal to neutral oils for general purposes. As a matter of fact paraffin oils are always considered second-class lubricants. |<sup>100</sup>

The oils which we manufacture (all neutral oils) are distilled from Pennsylvania crude oil, sweetened in the stills, and filtered | through bone-black<sup>4</sup> or fuller's earth. They are made in a multitude of different grades and differ widely in gravity, | viscosity, color, and flash and fire tests. Some are used for lubricating and others for burning purposes.

We have requested | our representative, Mr. T. W. Middleton, to call on you in the course of a few days. He will be | glad to go over your proposition with you. Please be assured that we stand ready to do everything in our |<sup>200</sup> power to be of assistance to you.

Very truly yours, (210)

3

Mr. Roland E. Rogers,  
Chief Engineer, Butte Electric  
Co.,  
Butte,<sup>5</sup> Montana.

Dear Sir:

We take pleasure in giving you the information requested in yours of the 5th. We use the Herschel | and the Conradson tests for measuring the emulsifying properties of turbine oils.

In the Herschel test, the oil is placed in a glass receptacle, mixed with a specified amount of distilled water, and stirred at 130° F.<sup>6</sup> for a definite time by means of a carefully prepared paddle, which rotates at a prescribed rate of speed. The mixture is then allowed to stand, and the speed with which the oil separates from the water is recorded. The speed of separation is then referred to a table which makes it possible to reduce all results to a uniform basis of units varying from 0 to 1200. Thus, an oil which gives 60 units is a relatively poor oil and is given 60 emulsibility.

In the Conradson test, the oil is placed in a receptacle and steam is injected into it through an orifice of specified dimensions for a definite length of time. The mixture is then allowed to stand, and the rate of separation is noted. In this test a perfect oil is one that will separate under the conditions of the test to the extent of 100% and is classed as a 100% emulsibility oil.

If there is any further information we can supply, we shall be glad to hear from you further.

Yours very truly, (246)

4

Pacific Oil Company,  
Chestnut and Swanson Streets,  
San Francisco, Calif.  
Gentlemen:

In accordance with your instructions I visited the plant of the Marysville Company, Marysville, Tenn.

My visit was a great disappointment, as the amount of oil they use did not warrant an investigation. They have purchased one barrel of High Standard Cylinder Oil, which under ordinary circumstances will last them a year.

On a trial run of High Standard it developed that the oil did not atomize. The engine is of the cross compound type with the receiver located seven feet below the cylinder centers, which forms a pocket for the emulsified oil. In the course of a month this oil formed an insulation on the coils, with the result that water gathered in the low pressure cylinders and caused a very audible water hammer. Had this engine been of the high pressure or tandem compound type, this difficulty would not have occurred; but their equipment is certainly very favorable for indicating poor atomizing of cylinder oil. The water here is very high in alkalinity, which aggravates the situation.

Improvements in installation could be suggested for this plant, but the quantity of oil used is so small that it is useless to take the matter up. I recommend, therefore, that these people be allowed to return the barrel of High Standard and that a barrel of Anti-Friction be forwarded to them. As to their other requirements, three barrels of Sabine Dynamo and two barrels of Thread Cutting Oil would be a year's supply.

Yours very truly, (249)

<sup>6</sup> 130 degrees Fahrenheit.

5

W. B. Baldwin,  
Chief Engineer, Merchants &  
Miners Transportation  
Co.,  
Baltimore, Md.

Sir:

We have your inquiry regarding turbine oils. Radium Turbine perfectly adapted to any type vertical or horizontal steam engine.

Such an oil must primarily be an efficient lubricant and one will retain its qualities under higher heat than that encountered in ordinary steam engine bearings. It must filter perfectly and not deteriorate with the centrifuging and cooling processes through which it passes. In the radial type turbine the oil is fed into the oiling system at a rate of many hundred pounds per square inch, and in the step through it must sustain the entire weight of the revolving parts.

Every one agrees there is no economy in cheap oils, but we would like to bring this truth home more fully to those responsible for the selection of the costly modern turbine engine. Our oil may not be as cheap as some other oils, but we guarantee perfect lubrication of plant if you use it. It can be used indefinitely, and because of its outstanding qualities will be far more economical under long service than any other uniform oil

This oil is recommended by the 100 largest turbine engine builders in the world. We supply it to the United States Government for use in the most modern types of turbines, where it is giving perfect results.

We will deliver a five-gallon sample can so that you can test and analyze this oil.

Yours very truly, (250)

6

The Midvale Iron & Steel Company,  
225 Farmers National Bank  
Building,  
Pittsburgh, Pa.

Gentlemen:

What quenching oil are you using in manufacturing your tool steels? In one of the oldest and largest tool steel plants in America a series of comparative and practical tests of all well-known quenching oils was recently made, with the result that this plant now uses Robsol exclusively.

It was found that Robsol ranked highest in quenching speed, thermal-conductivity, and uniformity. In this plant the quenching systems are periodically tested (about every thirty days), and the fact was also developed that Robsol increases slightly in quenching speed and hardening power.

This means that this plant is assured of absolutely uniform results in the hardening of its products. In the tests made Robsol did not increase in viscosity, did not de-



compose, and was not altered in any way. It is so homogeneous that the usual action which takes place in all quenching tanks—the fractional distillation or evaporation of the lighter oils, leaving the heavy oils in the system—will not take place with the use of Robsol. When an oil becomes heavy, increases in viscosity, and rises rapidly in flash and fire test, it will not take the heat away from the piece rapidly; the steel will be soft and will not show the desired physical characteristics.

This oil has been in constant use in a large number of manufacturing plants for years. It is now in use in spring, ball-bearing, gauge, gear, typewriter, rifle, machine tool, saw, wire, automobile, automobile parts, and gun manufacturing plants. It will be to your advantage to give Robsol a trial.

Yours very truly, (264)

7

The Gulf Refining Company,  
Virginia Trust Company Bldg.,  
Roanoke, Va.

Gentlemen:

Attention Mr. White

Yours of February 2 in regard to the complaint made by the Chesapeake & Ohio people on the last few cars of fuel oil is received.

It seems impossible, as they suggest, that the trouble is due to dirty cars. Aside from a certain

amount of deposit which we cannot get away from, Mr. Wilcox informs me that every empty car before being loaded is carefully tested by steam pressure for leaks, and is then blown out thoroughly with compressed air to remove all dirt and any trace of moisture that might remain. Their contention as to water, however, is doubtless correct.

Bayonne has only two retained samples<sup>9</sup> of shipments recently made them, one taken on January 16 and the other on January 21. Centrifugal tests of the 30 gravity oil from two of the storage tanks show .3 and .4 of 1% of water and sediment combined.

On account of the extremes of temperature at the present time the tanks sweat more or less, thus precipitating a certain amount of water. As this oil thickens to a certain extent during cold weather, the sediment and water do not thoroughly settle out and remain in suspension.

Undoubtedly a very decided improvement can be shown by an addition of something like 25% of Solar, which remains very limpid during the cold weather. By this means the 30 gravity will be thinned sufficiently, I believe, to make it perfectly satisfactory. We shall therefore ship this mixture as long as the cold weather lasts.

Yours very truly, (267)

<sup>8</sup> Sometimes spelled *gage*.

<sup>9</sup> Retained for analysis in case the buyer questions the quality.

8

W. J. Stewart,  
 Resident, Waverly Oil Co.,  
 Pittsburgh, Pa.

Sir:

On my inspection trip to our refineries in the Mid-Continent district, the conditions in the industry are generally to be unsatisfactory. Our refining capacity of about 330,000 barrels of crude a day, the refineries in this section are running at one-third of normal, or 110,000 barrels of crude a day. This means an output of about 50,000 barrels of fuel oil per day, which is difficult to market at a fair price.

The refineries for the most part are producing as much fuel oil as they can keep it off the market. Other extensive refineries are cutting 36 gas oil, for which there is no air market, from their fuel oil residue and are running the heavier residue into road oil, for which there is a good demand as cities, towns, and counties are now resuming road making and road improvement operations. Other refineries are in a position to burn practically their entire output of fuel oil through their stills, thus taking the load off the overloaded market at the same time saving on their bills. In addition there are some long contracts for fuel oil being negotiated, notably with the Railroad Administration, which take care of a portion of the product at a good price, as high as \$1.75 being the price on some contracts.

There are many other refineries, however, having only limited storage facilities, some with only enough to take care of two days' output of fuel oil, that are compelled to sell it at ruinous prices in order to enable the plants to keep running. A number of them are receiving only 60 to 85¢ a barrel.

Yours very truly, (303)

9

Cluett & Peabody Company,  
 Troy, N. Y.

Gentlemen:

We have been deeply interested for many years in the subject of your letter of June 14.

Many manufacturers of fine textiles and fabrics have had the unfortunate experience you have had—their goods come back from the bleacher weakened in strength and showing streaks and stains. Our chemists made an exhaustive study of textile manufacturing and bleaching processes to ascertain the cause. Their experiments absolved the bleacher from blame. They discovered that oil from winding and knitting machines does not thoroughly wash out of the goods before they are subjected to the bleaching process. This oil holds the chlorine derived from the chloride of lime used in bleaching, thus producing stains and a weakening of the fibre of the fabric.

The solution of the difficulty is to be found in the proper selection of lubricants. Our chemists have built up a line of oils especially de-

veloped and tested to meet the varied and exacting demands of textile lubrication. For wick-lubrication of yarns on winding and knitting machines, we developed Atlantic Stainless Spindle Oil, which is a special compound of animal fats and mineral oils. It is so light in color that it will not stain and of <sup>200</sup> such a character that it readily washes out of the fabric.

Eclipse White Spindle Oil should be used in the manufacture of fine quality white hosiery and underwear which are not to be sent to the bleacher, in which case a highly refined oil that will not stain is required.

The manufacture of colored or black hosiery and underwear does not require the same high quality stainless oil as is required in the making of white goods, but an oil of proper viscosity to lubricate efficiently the high speed rotary and oscillatory motions of the knitting machines is necessary. Experience <sup>300</sup> has shown that Acme Knitting Machine Oil is the best suited for this purpose.

We should like to have one of our lubricating engineers take up this problem in your factory. After studying the conditions in the plant he can recommend exactly the right oils to be used. If this is agreeable to you we shall have a representative at your plant on any date you may specify.

Yours very truly, (371)

<sup>10</sup> Abbreviation for *namely*.

10

Central Motor Accessory & Supply  
Co.,  
1147 Broad Street,  
San Jose, Calif.

Gentlemen:

There are three factors to be considered in the lubrication of the automobile engine: viz.,<sup>10</sup> the speed of the engine, the load carried, and the operating temperature.

While the speeds of engines vary for the different makes, they operate between 800 to 3000 revolutions per minute—high speeds for machinery composed largely of reciprocating parts. It is the consensus of opinion that high speed machinery requires an oil of low viscosity to lubricate the bearings without excessive friction. A very large proportion of the frictional losses of an engine (which amount to about 30% of <sup>100</sup> the total power developed) occurs at the bearings, so that it follows that an oil of too high viscosity increases the friction losses at the bearings.

The load on the wrist and crank pins and main bearings results from the thrust produced by the explosion in the combustion chamber and the weight of the parts. This load is at its maximum an instant after the piston begins to descend on its working stroke, and amounts to more than two tons with a piston 4½" in diameter. It is obvious that the lubricating oil must be sufficiently fluid to insinuate itself between the

ing surfaces, and sufficiently  
s to remain in place under such  
pressure.

The | temperatures of the gases  
| the engine cylinders range  
about 250° F. at the end of |  
| take stroke to about 2800° F.  
at the moment of explosion.  
| ge part of | the heat generated  
| ismitted to the piston and cylin-  
| valls through the film of oil  
| separates them. It | is ob-  
| that the oil may carbonize or  
| lize under the temperatures to  
| it is subjected. This condition  
| es |<sup>100</sup> of the oil the quality  
| manence at high temperatures;  
| must not readily volatilize or  
| ouse. If | it volatilizes, the  
| mption of oil will be excessive; if  
| omposes, carbon troubles will

o prepare an oil | meeting  
| varied and conflicting require-  
| demands large resources of  
| materials and adequate refining  
| ies. Atlantic Polarine is of-  
| | to you as the highest grade  
| oil, scientifically prepared  
| selected fractions of those ma-  
| s best suited to its | manufac-  
| and one which has been demon-  
| d to be exactly right for your

Yours very truly, (397)

11

Automobile Accessories Co.,  
Jacksonville, Fla.  
emen:

We are going to give you some  
reasons why we believe Atlantic

Motor Oils to be as nearly | ideal in  
lubricating properties as lubricants  
can be. In order to do so we must  
tell you something about the |  
manufacture of motor car lubricants.

Motor oils are distilled from  
crude petroleum. There are many  
grades of crude oil—some | good,  
some not so good. Even the good  
grades vary, some being better for  
one particular lubricating service  
than others. | At the start of the  
refining process you can see that the  
skill of the refiner comes into play in  
|<sup>100</sup> the selection of the right crude  
oil.

Even the good crude oils contain  
many different substances, such as  
gasoline,<sup>11</sup> benzine, | paraffin wax,  
and lubricating oils. Distilling from  
the crude oil just the one lubricating  
oil needed for a particular service |  
is a problem that calls for expert  
knowledge and high-grade equipment.

The first part of the refining pro-  
cess removes | all the dirt and water  
from the crude oil. In the various  
steps of distillation the crude oil is  
boiled | at different temperatures,  
each substance being vaporized at its  
particular boiling point and then  
condensed by low temperature into  
a |<sup>200</sup> liquid. Benzine, kerosene,  
and the lubricating oils vaporize at  
different temperatures.

That part of the crude oil in  
which we | are interested is then  
chilled until the wax in it is frozen.  
A special filter press removes this  
wax, leaving | a combination of oils  
of different qualities, which is dis-

<sup>11</sup> Spelled also *gasolene*.

tilled again and again until it is separated into various grades of lubricating oils ready for use.

This process does not sound so very complicated, yet it is. Even with good crude oil to start with it is entirely possible to make it into lubricating oils of questionable quality. It is the old, old story that an unskilled workman cannot make a good job even with good tools; neither can a skilled workman do his best with poor tools.

The Atlantic Refining Company, the oldest and largest lubricant manufacturers in the world, can truthfully boast of having not only good workmen and good methods, but a wide variety of crude oils from which to choose. This last advantage is exceedingly important, as the ability of the company to supply its patrons with the proper motor oils would be seriously hampered were it compelled to use a particular crude oil because of local conditions.

We have developed an oil particularly adapted to the make of car which you use. A list of Atlantic Service Stations is enclosed and we invite you to make full use of the facilities they offer.

Very truly yours, (441)

12

as it is the policy of all successful dealers and garages to supply their customers with lubricants that will give them the best results we know that you will be interested in our autoline oil and other motor lubricants autoline oil has been so eminently satisfactory to operators of motors that it is hardly necessary for us to discuss its many good qualities we assume that you are familiar with its advantages especially since autoline is so widely used however we may say briefly that its superiority is due to the fact that it is manufactured solely from premium pennsylvania crude oil by a special manufacturing process including extra careful filtering that frees it absolutely from foreign matter many of the oils being offered at this time are bleached by acid to give the same results that we get by filtering but while such oils can be marketed at lower prices than filtered oils the acid remaining in them is certain to be detrimental to the metal surfaces with which they come in contact we have had a number of calls recently for autoline lubricants from car owners in your city and enclose copies of several letters we have received it will pay you to carry a stock of our oils we shall be pleased to furnish you with further information prices and terms if you are interested yours very truly

## PIPE LINE RIGHT-OF-WAY

**Know All Men By These Presents,** that for and in consideration of the payment of the sum of *One Hundred Fifty (\$150.00)* - - - - - Dollars to us in hand paid, the receipt whereof is hereby acknowledged, *we, the undersigned,* .....  
*John C. Richardson, husband, and Ella M. Richardson, his wife,* joint owners of the lands hereinafter described, .....  
 have granted and do hereby grant unto THE PACIFIC OIL COMPANY, of California, a corporation, its successors and assigns, the right-of-way for a <sup>(3) three</sup> inch pipe line for a distance of *575* rods, on, over and through ~~our~~ lands in the District of *Noten*, County of *Butterfly*, State of *Oklahoma* containing *280* acres, more or less, bounded as follows, to wit:

On the north by the lands of *James Price* .....  
 On the east by the lands of *C. J. Carke* .....  
 On the south by the lands of *M. F. Palmer* .....  
 On the west by the lands of *(Mrs.) Mary Elizabeth Smith* .....

TOGETHER with the right to lay, relay, maintain, operate and remove the same, and the right to ingress and egress for these purposes. Additional lines may be laid along the course of the original line laid hereunder at any time in the future, upon payment in advance of the sum of *ten (10)* cents per rod for each such additional line.

In witness whereof, we have hereunto set our hands and seals this *twenty-second* day of *November* 19*20*.

Witness: ..... [ SEAL ]  
 ..... [ SEAL ]

## OFFICE TRAINING ASSIGNMENTS

In this section you are employed in the general manager's office of the Pacific Oil Co., San Francisco, Calif.

## TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

## ARRANGEMENT

In writing the letters in this section follow the arrangement of the style letter.

**Assignment 1.** Copy the style letter with carbon on form 27.

**Assignment 2.** Copy Letter 10 with carbon on a letterhead. Hand in both letters for approval.

## RIGHT-OF-WAY AGREEMENT

**Assignment 3.** Prepare the contract on page 213 on the typewriter in duplicate, using the sheets marked "form 28." Some care will be required to do this neatly. The typewritten words should be on the dotted lines. Submit for approval.

## BOND

Each of our agencies is required to file with us a bond similar to the following:

## PACIFIC OIL COMPANY

San Francisco, California

KNOW ALL MEN BY THESE PRESENTS, That we, the Liberty Motor Supply Company of Los Angeles, California, as Principal, and the United States Fidelity & Guaranty Company of Baltimore, Maryland, a corporation organized and existing under the laws of the State of Maryland, as Surety, are held and firmly bound unto the PACIFIC OIL COMPANY, of San Francisco, a corporation of the State of California, in the sum of One Thousand (\$1000.00) Dollars, lawful money of the United States of America, to the payment whereof to the said Pacific Oil Company, its successors and assigns, well and truly to be made, we do bind ourselves, our heirs, executors, administrators, and successors, and each and every one of them, jointly and severally, firmly by these presents.

WITNESS our hands and seals this tenth day of February, in the year of our Lord One Thousand Nine Hundred and Twenty.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH, That if the above bounden Liberty Motor Supply Company, Principal, its heirs, executors, and administrators, shall and do well and truly pay or cause to be paid unto the said Pacific Oil Company, its successors and assigns, all sums of money it may owe said Company by reason of the terms hereinafter set forth, then this obligation is to be void; otherwise it is to remain in full force and virtue with respect to all moneys that may come into the hands of said Principal as agent for said Company, the said Principal being employed as a selling agent with the right to make collections for said Company; and all moneys that may come into the hands of said Principal by reason of any employment whatsoever by said Company; and further, all moneys which the said Principal may owe the said Company by reason of overpayment of any commissions allowed said Principal, arising in the following manner, to wit:

The said Company may make sales through the said Principal, at the regular quoted prices, which regular prices are subject to a reduction conditioned upon the purchaser's taking a certain amount of the Pacific Oil Company products within a year, according to the terms of the agreement made at the time with the purchaser; the said Principal to be paid its commission according to the terms of its contract of employment, which payments shall be based upon the regular quoted prices. Should such arrangement at the end of the year or any adjustment period show an overpayment of commission, it is the duty of the said Principal to refund such overpayment to the said Company.

The liabilities of the said Principal for which this bond is given are more fully set forth and explained in the contract of employment of the Principal with the Company, bearing date of February 8, 1920.

Signed, sealed and  
delivered in the  
presence of:

\_\_\_\_\_(SEAL)

Principal

by \_\_\_\_\_

\_\_\_\_\_(SEAL)

Surety

by \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Assignment 4.** Make a copy of the bond with carbon, using legal size paper. Hand in.

#### TRANSPORTATION

Merchandise is shipped by mail, express, or freight, according to the size of the shipment, its value, and the time within which it is to be delivered. When packages are small or when quick delivery is desired, shipments should be made by parcel post or express, according to whichever method is cheaper. The rates are based upon weight and distance. Larger shipments should be forwarded by freight. All freight rates are based upon a minimum weight of one hundred pounds; if a shipment weighs less the full rate for one hundred pounds is charged. Freight transportation is slower than express or mail, but the rates are much lower. Parcel post packages must not exceed seventy pounds in weight when shipped to a point within the first three zones, and fifty pounds when shipped to points within the fourth to eighth zones. Packages shipped by express must not exceed three hundred pounds in weight, or two hundred and fifty pounds if they are transferred from one carrier to another en route. A shipment can be sent C. O. D. (collect on delivery) by parcel post or express; i.e., the post office or express company will collect the bill for the merchandise when it is delivered to the consignee and remit the amount to the consignor.

#### BILLS OF LADING

When goods are shipped by freight a bill of lading is prepared by the shipper in triplicate. The first, or "original" sheet, is the bill of lading proper, which is retained by the shipper; the second sheet is the "shipping order," which is delivered to the transportation company with the shipment, and the third sheet is a "memorandum" copy, which should be mailed to the consignee to notify him that the shipment has been made and by what route.

Bills of lading are in two forms—the "straight" bill and the "order" bill. The straight bill is non-negotiable; i.e., delivery of the shipment covered by it can be made only to the consignee named therein. The next illustration shows the original sheet of a straight bill of lading. The shipping order and memorandum copies are not illustrated because they are exact duplicates of the original with the exception of the headings. All three copies are used in the assignments which follow and are supplied in the budget of forms. Note the differences in the headings. The pen-written matter shown in the illustration is filled in by the shipper. The other data is entered by the transportation company.

A freight shipment on which the consignor desires to collect before it is delivered to the purchaser must be sent with a sight draft attached to the bill of lading. On shipments of this kind the "order bill of lading" is used. The shipper consigns the goods to himself to the city in which the purchaser is located. the transportation company being instructed to notify the purchaser upon its

Uniform Bill of Lading—Standard form of Straight Bill of Lading approved by the Interstate Commerce Commission by Order No. 787 of June 27, 1908.

**UNITED STATES RAILROAD ADMINISTRATION**  
 DIRECTOR GENERAL OF RAILROADS  
**SOUTHERN PACIFIC RAILROAD**

**STRAIGHT BILL OF LADING—ORIGINAL—NOT NEGOTIABLE.**

Shipper's No. 1987  
 Agent's No. \_\_\_\_\_

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Original Bill of Lading.

..... 19.....  
 ..... the property described below, in apparent good order, except as noted  
 stents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said Company agrees  
 arry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said desti-  
 on. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as  
 ach party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the  
 ditions, whether printed or written, herein contained (including conditions on back hereof) and which are agreed to by the shipper and  
 pted for himself and his assigns.

The Rate of Freight from .....

..... is in Cents per 100 Lbs.

| IF Through 1st | IF 1st Class | IF 2d Class | IF 3d Class | IF 4th Class | IF 5th Class | IF A Class | IF B Class | IF C Class | IF D Class | IF E Class | IF Commodity |
|----------------|--------------|-------------|-------------|--------------|--------------|------------|------------|------------|------------|------------|--------------|
|                |              |             |             |              |              |            |            |            |            |            |              |

(Mail Address—Not for purposes of Delivery.)

signed to Western Paint & Oil Co.  
 destination, Sacramento, State of Calif. County of .....  
 rts, S.P. - F.F. Car Initial ..... Car No. ....

| No. Packages | DESCRIPTION OF ARTICLES AND SPECIAL MARKS | WEIGHT (Subject to Carriage) | CLASS OR RATE | CHECK COLUMN |   |
|--------------|---|------------------------------|---------------|--------------|---|
| 2            | Bbls Oil                                  | 6342                         |               |              | If charges are to be prepaid write or stamp here, "To be Prepaid."                        |
|              |   |                              |               |              |   |
|              |   |                              |               |              | Received \$ _____ to apply in prepayment of the charges on the property described hereon. |
|              |   |                              |               |              |   |
|              |   |                              |               |              | Agent or Cashier  |
|              |   |                              |               |              | Per _____<br>(The signature here acknowledges only the amount prepaid.)                   |
|              |   |                              |               |              | Charges Advanced: \$ _____  |

Pacific Oil Co. Shipper. \_\_\_\_\_ Agent.  
 Per J.W. Brown Shipping Clerk Per \_\_\_\_\_

(This Bill of Lading is to be signed by the Shipper and Agent of the carrier issuing same.)

Form 18-A Regular  
 Uniform Bill of Lading—Standard Form of Order Bill of Lading approved by the Interstate Commerce Commission by Order No. 787, of June 27, 1908. Including provisions to conform with the requirements of the Cummins Amendment to the Act to Regulate Commerce, effective June 2, 1915.

**The Atchison, Topeka & Santa Fe Railway Company**  
 COAST LINES

ORDER BILL OF LADING—ORIGINAL

Shipper's No. 1989

Agent's No. \_\_\_\_\_

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Original Bill of Lading.

at \_\_\_\_\_ the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said Company agree to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions, whether printed or written, herein contained (including conditions on back hereof) and which are agreed to by the shipper and accepted for himself and his assigns.

The surrender of this Original ORDER Bill of Lading properly endorsed shall be required before the delivery of the property. Inspection of property covered by this bill of lading will not be permitted unless provided by law or unless permission is endorsed on the original bill of lading or given in writing by the shipper.

The Rate of Freight from \_\_\_\_\_

|           |          |          |           |           |           |           |           |           |            |            |            |                          |            |            |            |            |            |
|-----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|--------------------------|------------|------------|------------|------------|------------|
| to _____  |          |          |           |           |           |           |           |           |            |            |            | is in cents per 100 lbs. |            |            |            |            |            |
| 1st Class | 2d Class | 3d Class | 4th Class | 5th Class | 6th Class | 7th Class | 8th Class | 9th Class | 10th Class | 11th Class | 12th Class | 13th Class               | 14th Class | 15th Class | 16th Class | 17th Class | 18th Class |
|           |          |          |           |           |           |           |           |           |            |            |            |                          |            |            |            |            |            |

(Mail Address—Not for purposes of delivery)

Consigned to ORDER OF Pacific Oil Co.  
 Destination Seattle, State of Wash., County of \_\_\_\_\_  
 Notify Atkinson, Ward & Co., 219 Exchange Way  
 At Seattle, State of Wash., County of \_\_\_\_\_  
 Route A. T. & S. F., Car Initial \_\_\_\_\_, Car No. \_\_\_\_\_

| No. Packages | DESCRIPTION OF ARTICLES AND SPECIAL MARKS | WEIGHT (Subject to Correction) | CLASS OR RATE | CHECK COLUMN |  |
|--------------|---|--------------------------------|---------------|--------------|--|
| 1            | Tank Car Oil                              | 52575                          |               |              | If charges are to be prepaid write or stamp here, "To be Prepaid."<br><br>Received \$ _____ to apply in prepayment of the charges on the property described hereon.<br><br>Agent or Clerk _____<br><br>For _____<br>(The signature here authorizes only the amount prepaid.)<br><br>Charges Advanced: \$ _____ |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |
|              |   |                                |               |              |  |

Pacific Oil Co. Shipper. \_\_\_\_\_ Agent.  
 For J. W. Brown Shipping Clerk \_\_\_\_\_  
 (THIS BILL OF LADING IS TO BE SIGNED BY THE SHIPPER AND AGENT OF THE CARRIER ISSUING SAME.)

ILLUSTRATION 26—ORDER BILL OF LADING

arrival. The order bill is negotiable; i.e., the shipment may be delivered to the purchaser upon the consignor's order endorsed thereon to do so. When the shipper forwards the shipment he sends a draft attached to the original bill of lading properly endorsed to his bank for collection, which in turn forwards it to its correspondent bank in the city in which the purchaser is located. This bank notifies the purchaser of the arrival of the draft. Upon payment of the draft he receives from the bank the original bill of lading endorsed as paid in full. When the shipment arrives the transportation company sends the purchaser a "Notice of Arrival," and upon the surrender of the endorsed bill of lading to the transportation company the shipment is delivered. The illustration on page 18 shows the original of a bill of lading covering a shipment made in this way.

**Assignment 5.** We have sold on order #6736 to the Mt. Vernon Service Co., Ashland, Ore., 10 barrels of oil, gross weight, 5124 pounds, to be shipped via S. P. freight.

On form 29 (three sheets) make out on the machine a bill of lading in triplicate for this shipment, inserting our order number in the space for the shipper's number. Present for signature.

**Assignment 6.** We have sold the Peerless Auto Service Co., 716 Tyson St., Riverside, Calif., order #6737, 14 barrels of oil, 2 barrels of soap, and 1 barrel of grease, gross weight, 8627 pounds, to be shipped by A. T. & S. F. freight, draft attached to bill of lading.

On form 30 make out the bill of lading required. Present for endorsement and signature.

#### BILLING

All our automobile oils are put up in 52-gal. barrels; greases and soaps are shipped in 450-lb. barrels. Prices, however, are quoted by the gallon or pound. Our price list of automobile oils, greases, and soaps is given below.

Shipments are made f.o.b. San Francisco. Our regular discount to dealers is 30%. Our terms are 2% for cash in 10 days—30 days net. Illustration 27 shows one of our bills.

#### Price List

|                           |                |
|---------------------------|----------------|
| Taxi Auto Oil             | 40¢ per gallon |
| Amber Auto Oil            | 45¢ " "        |
| "K" Auto Oil              | 45¢ " "        |
| "C" Auto Oil              | 45¢ " "        |
| Standard Special Auto Oil | 50¢ " "        |
| Heavy Auto Oil            | 50¢ " "        |
| Transmission Oil          | 50¢ " "        |
| Steam Auto Oil            | 50¢ " "        |
| Peerless Motor Cycle Oil  | 45¢ " "        |
| Defiance Auto Oil         | 75¢ " "        |
| Timing Gear Oil           | 75¢ " "        |

|                             |              |
|-----------------------------|--------------|
| Cup and Transmission Grease | 8¢ per pound |
| Sponge Grease               | 9¢ " "       |
| Linseed Oil Soap (Soft)     | 14¢ " "      |
| Linseed Oil Soap (Hard)     | 15¢ " "      |

### PACIFIC OIL COMPANY

INCORPORATED IN CALIFORNIA

Chestnut and Sansom Streets

SAN FRANCISCO, CALIF.

Sold To McOlintock Motor Company

Date Feb. 19, 1920

Marshfield, Ore.

Our Order No. 6742

Year Order 2/12/20

Ledger Folio 217

Shipped on 2/19/20

By S. P. Frt.

TERMS: 2% for Cash in 10 days  
Net 30 days

| BARRELS | KIND                           | GALLONS | PRICE | AMOUNT | TOTAL  |
|---------|--------------------------------|---------|-------|--------|--------|
| 2       | bbls. Amber Auto Oil           | 104     | .45   | 46.80  |        |
| 1       | " X " "                        | 52      | .45   | 23.40  |        |
| 1       | " Transmission Grease 450¢     |         | .08   | 86.00  |        |
| 1       | " Linseed Oil Soap (Hard) 450¢ |         | .15   | 67.50  |        |
| 3       | " Stand. Special Auto Oil      | 156     | .50   | 78.00  | 251.70 |
|         | Less 30%                       |         |       |        | 75.51  |
|         |                                |         |       |        | 176.19 |

#### ILLUSTRATION 27—BILL OR INVOICE

**Assignment 7.** From the following data prepare bills in duplicate on the billheads in the budget (marked "form 31"), using the current date, and submit them for approval. Use plain paper for the carbons. Make the extensions and deduct the discount of 30% on each bill.

1. Sold to Mt. Vernon Service Company, Ashland, Ore., our order 6736, ledger folio 245, their order dated 5 days ago, shipped today by S. P. freight.

- 3 bbls. Amber Auto Oil
- 4 bbls. Standard Special Auto Oil
- 1 bbl. Transmission Oil
- 1 bbl. Cup and Transmission Grease
- 1 bbl. Linseed Oil Soap (Soft)

2. Sold to Peerless Auto Service Company, 716 Tyson Street, Riverside, Calif., our order 6737, ledger folio 273, their order dated 8 days ago, shipped yesterday by A. T. & S. F. freight.

- 2 bbls. Steam Auto Oil
- 2 bbls. Peerless Motor Cycle Oil
- 3 bbls. Defiance Auto Oil

- 1 bbl. "K" Auto Oil
- 6 bbls. Taxi Auto Oil
- 2 bbls. Linseed Oil Soap (Hard)
- 1 bbl. Sponge Grease

3. Sold to Lexington Garage, 1101 Homewood Ave., San Diego, Calif., order 6738, ledger folio 72, their order dated 4 days ago, shipped today via American-Hawaiian S. S. Tacoma.

- 2 bbls. Linseed Oil Soap (Soft)
- 7 bbls. Amber Auto Oil
- 4 bbls. "C" Auto Oil
- 6 bbls. Standard Special Auto Oil
- 9 bbls. Heavy Auto Oil
- 2 bbls. Timing Gear Oil
- 2 bbls. Peerless Motor Cycle Oil
- 4 bbls. Transmission Oil
- 11 bbls. Defiance Auto Oil
- 2 bbls. Sponge Grease

4. Sold to the O. K. Auto & Supply Company, 642 Mercer Ave., Reno, Nev., order 6739, ledger folio 166, their order dated 7 days ago, shipped yesterday S. P. freight.

- 1 bbl. Linseed Oil Soap (Hard)
- 1 bbl. Sponge Grease
- 4 bbls. Defiance Auto Oil
- 18 bbls. Taxi Auto Oil
- 7 bbls. Standard Special Auto Oil
- 14 bbls. Heavy Auto Oil
- 6 bbls. Transmission Oil
- 2 bbls. Steam Auto Oil
- 1 bbl. Peerless Motor Cycle Oil

#### PUNCTUATION AND PARAGRAPHING

We are making a special effort at the present time to interest automobile dealers and supply houses in our Autoline Oil. Letter 12 is the first of a series of letters we are sending out on this subject.

**Assignment 8.** Write the letter with carbon to the following:

- Keystone Auto Supply Company, San Bernardino, Calif.
- Golden Gate Auto Agency, Bakersfield, Calif.
- Sunset Garage, Alhambra, Calif.

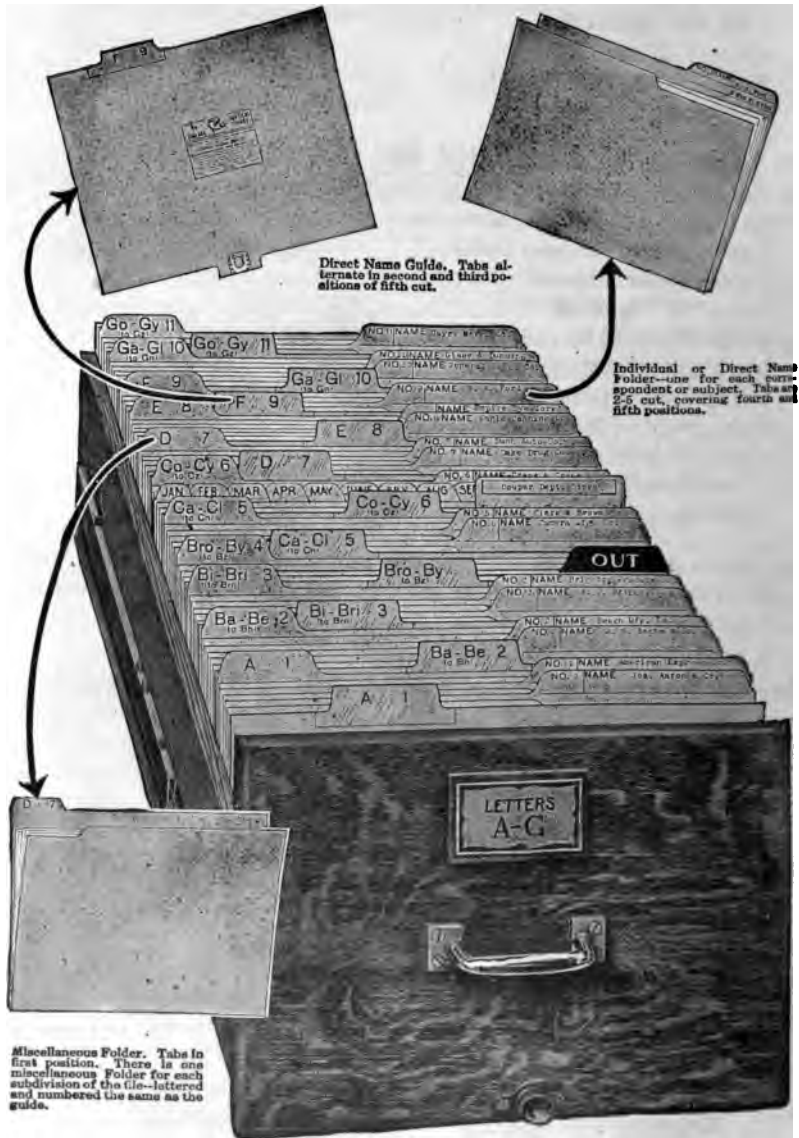


ILLUSTRATION 28—ALPHABETIC-NUMERIC FILING SYSTEM

## TRANSCRIBING

**Assignment 9.** The manager will dictate five letters from our correspondence for transcription.

## FILING

In many offices the simplest and most efficient method of filing is by the alphabetic-numeric system, which, as its name implies, combines the advantages of both the alphabetical and the numerical methods. Illustration 28 shows the equipment necessary for filing by this method. Guide cards with alphabetical subdivisions are provided. Consecutive numbers are assigned to the guide cards, and both the alphabetical subdivision and the number are printed on the tab of each guide. The folder for miscellaneous correspondence, which is placed at the back of each subdivision, has a tab with the same headings as its corresponding guide. The guides and folders are usually of different colors. Individual folders bear the name of the correspondent and the number of the subdivision in which they are filed.

Suppose that you wish to open a file with the Central Motor Accessory & Supply Company. The folder containing the correspondence would be filed in alphabetical order *back* of the Ca-CI guide and in front of the corresponding miscellaneous folder. Since this subdivision is numbered five you would write, "5" on the folder. All folders within a given subdivision of the file bear the same number.

In putting the folder back into the files it is only necessary to note its number and file it back of the corresponding guide. The time involved in comparing the name of the folder with the alphabetical subdivisions is saved. Correspondence is located in the files alphabetically and re-filed numerically.

**Assignment 10.** Determine the alphabetical subdivision for each letter to be filed. Write the names of the correspondents and their numbers as determined by the subdivisions within which their names come on individual folders, and then file the correspondence. Always file under the company name.

Should you wish to re-file any folder taken from the files, it is simply necessary to note the number you have written on the folder and file it back of the guide with the corresponding number.

The carbons of the bills you have prepared are to be filed in the Shannon file.



## ALL-SYSTEMS FILING CABINET FOR SCHOOLS

Illustration 29 shows a filing cabinet containing equipment for teaching systems of filing. This cabinet was especially designed for use in schools.



ILLUSTRATION 29—Y & E ALL-SYSTEMS FILING CABINET FOR SCHOOLS

## SECRETARIAL PRACTICE

Dealing with callers is not by any means the least important of the secretarial duties. On the one hand, he must jealously guard the time and energy of employer; and on the other, he must be so tactful and courteous in his dealing with callers that they will carry away a favorable impression of his house. The secretary keeps an appointment book. Each morning he places on his chief desk an "appointment schedule." This schedule should be followed as far as possible. If a caller is obviously overstaying his time, the secretary may call the chief on the telephone or even enter his office ostensibly to call his attention to an important matter.

But it is not in dealing with callers who have appointments that the secretarial chief difficulties arise. Every day there will be visitors—canvassers, salesmen

position-seekers—who by one method or another will seek to get an interview with the business executive. Some American business men pride themselves on being democratic and see every one who calls; but the directing head of a large business who daily makes executive decisions of far-reaching consequence must depend largely upon the secretary—"his other self"—to weed out callers. Of course every caller will ask at once if your chief is "in." You may reply that he is busy, tactfully trying to get the caller to give you his name and the nature of his business. Often you can give the information wanted; sometimes you can refer the visitor to another department; or you may make an appointment for some future time. The conditions which arise are so varying in their character that the secretary must summon all his alertness and resourcefulness. Perfect courtesy is the oil to pour on the troubled waters of these encounters with callers.

**Assignment 11.** Make up an appointment schedule. Divide the hours from 10 to 4:30 into 15-minute periods, thus: 10:00-10:15; 10:15-10:30, etc. Your chief has a luncheon engagement from 12 to 1:30 with Mr. Franklin, president of the Consolidated Motors Co. Enter on the schedule other engagements for 11:00 to 11:15; 2:15, 3:30, and 4:00.

**Assignment 12.** Prepare a memorandum setting forth the chief characteristics of the several systems of vertical filing. Make it brief and concise. (With your work on this section you have studied and practiced the four important methods of filing—alphabetical, geographical, numerical, and alphabetic-numeric. Slight variations of these methods have been devised. More detailed information can be secured from the advertising literature published by the various manufacturers of filing devices.)

**Assignment 13.** The general manager: "I have approved Mr. Berman's recommendation in this letter (No. 4). Send over an order for a barrel of Anti-Friction to go to the Marysville people at once. Write them a courteous letter telling them in a general way of Mr. Berman's report and informing them of the action we have taken."

**Assignment 14.** The general manager: "Write to the Liberty Motor Co. (page 214) enclosing the two copies of the bond you prepared for them. Ask them to sign both copies and return the original for our files."

**Assignment 15.** The general manager: "When you send this bill (page 221) to the Lexington Garage, tell them that we shall be compelled to raise our prices on our entire line of oils and greases on the first of next month. Suggest that it will be wise for them to send us an order for a large supply at once."

**Assignment 16.** The general manager: "Write up a little ad for the space we use in the *Machinery World*. I think we had better feature Paintoleum. You remember I wrote a letter about that recently (letter 1)."

Lathe and Milling Machines  
Grinders, Buffers, and Drill  
Presses  
Steam, Electric, and Gas  
Engines  
Air and Gas Compressors

Iron and Steel Castings  
Steam-Hydraulic Pumps  
Presses  
Condensers and Air  
Pumps  
Automobile Parts

# Bausch Machine Tool Company

GENERAL OFFICE AND WORKS  
BUFFALO

New York Office: Underwood Building

Chicago Office: Singer Building

Buffalo, N. Y August 25, 1920.

The Carey Machinery & Supply Co.,  
119 E. Third Street,  
Birmingham, Ala.

Gentlemen:

Our Duplex Milling Machine #20 should fully meet the requirements of the customer referred to in your letter of the 12th. This machine has a single pulley drive and combines the advantages of a vertical and horizontal machine, in addition to which the cutter-spindle can be operated at all angles between the horizontal and vertical positions. The adjustable feature of the cutter-head and ram, which are quickly set and locked in any position, enables this machine to handle a wide range of work.

Adjustment of the spindle to any position between the vertical and the horizontal is accomplished through the use of an adjustable cutter-head mounted on a ram or frame that can be moved in or out over the milling machine table in order to adapt it for vertical, horizontal, or angular cutting. To provide for variations of spindle speed, this machine is equipped with a constant-speed driving pulley and a change-gear mechanism.

The principal dimensions are as follows: Movement of main head frame or ram in and out over the column,  $11\frac{1}{2}$ " ; length of spindle,  $15\frac{1}{2}$ " ; number of available speed changes, 12; range of spindle speeds, 21 to 350 R.P.M.; speed of driving pulley, 385 R.P.M.; number of available feed changes, 16; range of available feeds,  $\frac{3}{8}$ " to 12" per minute; working surface of table,  $42 \times 9\frac{3}{4}$ " ; maximum longitudinal movement of table, 28" ; length of saddle,  $24\frac{1}{2}$ " ; maximum automatic transverse feed, 12" ; maximum vertical movement on knee, 18" ; recommended speed of countershaft, 335 R.P.M.; and net weight of machine, about 3800 pounds.

Yours very truly,

Bausch Machine Tool Co.

WDF-SK

## MACHINE TOOL SECTION

### TECHNICAL TERMS

- ular**—having an angle or angles; pointed.
- friction**—overcoming or reducing the resistance to motion which arises from the moving of one surface on another; as, *antifriction* bearings.
- omatic**—self-acting or self-moving.
- a projecting part of a wheel or other moving piece of machinery for imparting alternating motion.
- trifugal**—radiating or proceeding outward from a central point; operating by radial action.
- onometer (kro-nom'e-ter)**—a very exact timing apparatus.
- ck**—any appliance used in a lathe to hold a piece of work.
- et**—a tapering band or cylinder used to adapt a large holder to a small tool.
- pressor**—a machine by which air is compressed into a receiver so that its expansion may be used as a source of power.
- ter-shaft**—a short shaft driven by a belt from the main shaft.
- der**—the chamber in a steam or gasoline engine in which force is exerted on a piston.
- entric**—a device for converting a circular motion to a backward and forward motion.
- ge**—a projecting rim or edge.
- rum**—the point of rest about which a lever turns in lifting an object.
- rnor**—a self-acting regulator which controls the amount of power developed in a machine.
- gonal**—having six sides; as, *hexagonal* bolts.
- raulic**—pertaining to fluids in motion.
- ctor**—a contrivance for forcing feed water into a steam boiler.
- e**—a machine for working wood and metals.
- leable**—capable of being shaped or extended by hammering or rolling.
- hanism**—the structure of a machine, engine, or other contrivance.
- h**—the engagement of the teeth of a gearing.
- rometer (mi-krom'e-ter)**—an instrument for measuring very small lengths.
- mentum**—the quantity of motion of a body.
- l**—a short iron bar on one part of a machine to fit into the notches of another part so as to permit motion in one direction and prevent it in the reverse.
- on**—a small wheel with cogs which engage the cogs of a larger wheel.
- drant**—the fourth part of a given area.
- het**—a bar or tooth working with a toothed wheel.
- ner**—a tool for enlarging holes in a piece of metal.
- procating**—moving backward and forward or inward and outward in regular succession.

**refractory**—resisting ordinary treatment or strains (applied to metals that require an extraordinary degree of heat to fuse them, or that do not yield readily to the hammer).

**segment**—a section or part.

**sheave**—a grooved pulley or drum for use with a rope or cable.

**spindle**—a cylinder, pointed rod, or pin on which anything turns.

**spline**—a rectangular piece or key fitted in grooves in the hub of a wheel and the hub shaft so the wheel cannot turn on the shaft.

**swivel**—a fastening so contrived as to allow the part fastened to turn freely on its axis.

**tension**—the state of being stretched or strained; stress.

**thermal**—relating to heat.

**throttle**—the valve of a steam-engine regulating the supply of steam.

**tractor**—a power-driven machine used for drawing heavy loads.

**traverse**—that which crosses or travels; a part acting as a bar or barrier.

**valve**—any device used to control the flow of a liquid or gas through a pipe.

**weir (wēr)**—a screen.

**winchhead**—the revolving part of a hoisting apparatus about which the hoisting chain or rope turns.

**windlass**—a machine for hauling or hoisting heavy weights.

## CORRESPONDENCE

### 1

Mr. C. F. Ryan,  
Editor, The Machinery World,  
Philadelphia, Pa.

Dear Sir:

We have received the machinery list enclosed with your letter of the 17th and call your attention to | the following changes in prices:

|          |   |        |      |
|----------|---|--------|------|
| Item No. | 3—Warren Hydraulic Nosing Lathes                    | \$1000 | each |
| “ “      | 14—Universal   Hollow Hexagon Turret Lathes         | 1000   | “    |
| “ “      | 17—Amalgamated Lathes                               | 500    | “    |
| “ “      | 18   —Morgan Plug Milling Machines                  | 500    | “    |
| “ “      | 19—Davis Boring Lathes                              | 800    | “    |
| “ “      | 21—Wickes Engine Lathes, with taper attachment      | 1400   | “    |
| “ “      | 23—Sullivan Rough Grinding Machine   <sup>100</sup> | 500    | “    |

In regard to the Reed grooving and undercutting lathes, we have one with a 16" | 3-jaw universal chuck, and six with Hannifin air chucks with collets for boring operations. Two of the six chucks | have cracked turrets, and this condition should be taken into consideration when quoting. The motors have been removed from all | tools that were so equipped.

Yours truly, (167)

2

nwell Machine Co.,  
Norwich, Conn.

lemen:

We have your inquiry of the 12th and note that you are interested double-cylinder, single-drum | ing engines. We are pleased to the following for your consid- ion:

Two 5½ x 6" | double-cylinder, S. F. D.<sup>1</sup> Byers Hoisting Engines, with boilers attached, boilers tested to 150 % cold water | pressure, and engines under 100 % steam.

Price, f.o.b. Pitts-

burgh.....\$300 each  
One 4¼ | x 6" link motion S. F. D. American Contractors' Hoisting Engine, with boiler attached, and with an | <sup>100</sup> elevator sheave on the outer end of drum shaft used for operating two cages. The boiler is about 10 H.P.<sup>2</sup> | The hoist is in excellent condition and ready for immediate delivery. This outfit when new cost \$625. |

Price, f.o.b. Kittan-

ning, Pa.....\$375.00  
One 7 x 10" S. F. D. | Carlin Hoisting Engine without boiler. The drum is fitted with foot brakes, and it has a winchhead on the end | of the drum shaft.

Price, f.o.b. Pitts-

burgh.....\$265.00

<sup>1</sup> Abbreviation for Single Friction Drum.

<sup>2</sup> Horsepower.

<sup>3</sup> Revolutions per minute.

Before making shipment of any of | <sup>200</sup> these engines we will give them a first-class overhauling and will test them under steam. We thank you for | the inquiry and trust that some of the engines described will be of interest.

Yours truly, (236)

3

Mr. M. C. Scully,  
General Manager, Marquette  
Machine Tool Co.,  
Marquette, Michigan.

Dear Sir:

The Frazer Universal #37 was designed to handle precisely the class of work described in your | letter of the 29th ultimo. It is a high-powered self-contained grinder having twelve changes of table speed. | Twelve spindle speeds, varying from 14 to 279 R.P.M.,<sup>3</sup> are obtained by means of a | quick change gear-box. There are also three grinding wheel speeds. The counter-shaft is equipped with roller bearings and | may be operated at varying speeds up to 900 R.P.M.

The headstock is designed so as to | <sup>100</sup> swivel through the entire circle and is graduated to read in degrees. The spindle is made of special analysis chrome | vanadium steel, is hardened and ground, and runs in bronze boxes providing ample compensation for wear. The tailstock has both | lever and screw action and is equipped with a device that permits spring tension or rigid action as required. The | tail-

stock is provided with a holder to receive carbon points, which permits truing of the wheel without removing the work. |

All controlling levers are at the front of the machine within easy reach of the operator. The machine is equipped |<sup>200</sup> with the Frazer automatic reversing mechanism, which insures smooth operation and the highest rate of table traverse without shock or | jar.

We are in a position to make an immediate shipment of one of these grinders if we are favored | with your order.

Yours sincerely, (245)

4

Morgan Transmission Co.,  
Milwaukee, Wis.  
Gentlemen:

In reply to your letter of yesterday's date, the Standard Plain Milling Machine No. 0-13 is a sensitively | controlled hand-miller or, at your will, a power-feed horizontal milling machine for rapid production milling. It is equipped | with an automatically operated vertical milling attachment and will duplicate slotting or splining operations without requiring more than loading and | unloading attention on the part of the operator.

We enclose an illustration of the machine. The operation illustrated is end | milling 3½ x 8" surfaces on malleable iron castings. One-quarter<sup>4</sup>

inch of stock is |<sup>100</sup> removed. The floor to floor time <sup>5</sup> on each part is five minutes. The machine has a double overarm-flanged spindle, | reverse for which is self-contained in the machine; a solid top box-section knee; and an automatic flooding lubricating | system which is an integral part of the machine.

The sliding gears and clutches are made of chrome nickel steel, | heat treated and hardened. The teeth are of stub form to increase their strength, the ends being rounded to permit | of easy sliding engagement without clash. The face gear is as large as the largest cutter the machine will swing |<sup>200</sup> on each respective size. All speeds are transmitted through this gear, as it is the only member keyed to the | spindle.

This machine is one of the most flexible and adaptable tools in our line. Every modern machine shop should | be equipped with one of them.

Yours very truly, (249)

5

Walker Tool Co.,  
Sioux<sup>6</sup> City, Iowa  
Gentlemen:

The steam-driven air compressor referred to in your letter of August 24 is an Ingersoll-Rand machine | manufactured by the Chicago Pneumatic Tool Co. It is equipped with a slide-valve compound engine having 8" high | pressure and 13" low pres-

Figures which begin a sentence should be written out in words  
That is, from the beginning to the end of the operation.  
Pronounced soo.

ylinders, with 8" piston stroke. s a 3½ x | 36" fly-wheel, en-self-oiling frames, feather air, wedge adjustable crank and pin bearings, removable | main gs, box pattern crosshead, and nd bottom crosshead slippers. complete with Meyer cut-off, ll | <sup>100</sup> governor, and a full set cups and sight-feed lubricators. his compressor has a rated ca- of 197 | cu. ft. of air per e at 160 R.P.M., and is good 100 # pressure. The air inlet is ir discharge 2", water jacket r pipe ½", | and the diameter of ulley is 50" x 8" rim. It re- 34 H.P. | to operate and s 4500 #.

he compressor is in first-class ing condition and is ready for nmediate delivery at four hun- twenty-five dollars (\$425.00). e also willing to place it on a basis for | a period of not han two months at \$75 per t, with the privilege of applying | rental on the purchase price should subsequently decide to

Yours very truly, (256)

6

. J. Berry,  
Chief Engineer, Schuylkill Man-  
ufacturing Co.,  
Philadelphia, Pa.

Sir:

t gives us pleasure to say in to your inquiry of the 12th Gray Planers have | given us t satisfaction. We have three

of them in our shop, the sizes being 30 x 30", 48 | x 38", and 72 x 60".

The distinctive feature of this planer is its spiral-gear | driving system, which gives a continuous semi-rolling, semi-sliding action practically free from vibration. This drive gives motion | to the table by means of a spiral pinion which engages directly with the rack and has at all times | <sup>100</sup> eight teeth in working contact. The pinion is mounted on a shaft which crosses the bed diagonally and is driven | by a pair of bevel gears from the pulley shaft.

Another feature of the machine that deserves mention is its | positive lubricating system. The shaft bearings and washers are flooded with oil from large reservoirs. The oil also flows into | the spiral pinion box so that the pinion itself runs in oil.

The end thrust construction is entirely satisfactory. The | thrust on the spiral pinion shaft is taken by alternate hardened steel and vulcanized fibre collars, and any wear is | <sup>200</sup> taken up by an adjustable plug bearing. Our machines have been in use for over two years and it has | not been necessary for us to replace any of the parts.

It is our intention to replace all spur-gear | planers with spiral-gear planers as soon as our finances permit, because we have found that the latter construction gives | a much smoother drive and considerably longer wearing qualities.



We assure you that you will make no mistake in installing | them in your shop.

Yours very truly, (287)

7

Roswell Aluminum Co.,  
Canton, Ohio.

Gentlemen:

We are sending you an outline cut showing the general arrangement of an installation of hydraulic cylinders and control | boxes requested in your letter of March 13.

Our price includes one 6" hydraulic cylinder for each of the | three blast valves, one for the stack valve, and one down-run valve, making five cylinders in all for one | machine; also one interlocking valve box to control the five cylinders. The cylinders for the blast valves are placed on | special floor stands, the cylinder for the stack valve is placed on the top of the superheater, and the cylinder | <sup>100</sup> for the down-run valve is set in the floor. They are so arranged that the respective valves can be | readily operated by hand if the hydraulic gears should be out of commission for any cause. Our price does not | include installation or freight charges.

We furnish the valve stands and cylinders for the blast valves with threaded ends on | the lower ends of the racks, ready to be connected by short pieces of pipe to your valve stems. The | cylinder for the stack valve will have suitable brackets,

rack, and gear segment to fit the shaft of your stack | <sup>200</sup> valve, and the cylinders for the down-run valves will have a floor flange with guide, crosshead, and links, which | you will have to connect to your down-run valve levers. You would have to connect all the water pipe | to the cylinders and control box, and furnish a pump and suitable suction and pressure tank to deliver water to | the control box at 80 # pressure. You would also have to connect all the safety levers from the blast | valve floor stand back to the control box.

Yours very truly, (291)

8

Sloan Dredging Co.,  
Newport, R. I.

Gentlemen:

We have your letter of the 14th inst. informing us that you are in the market for a hoisting | engine of about 20 H.P. We have the following engines in stock:

One 7 x 10—20 H.P. | D.C. Flory skeleton hoisting engine, drums fitted with foot brakes, pawls, ratchets, and with winchhead on the end of | drum shaft, that we can sell for three hundred fifteen dollars (\$315.00) f.o.b. Cleveland, Ohio.

One 6½ | x 10—20 H.P. D.C. Mundy hoisting engine, drums 14" diameter, 22" between the flanges, | <sup>100</sup> engine rated to hoist 4000 # on a single line, levers mounted in quadrant, and drums fitted with foot |

<sup>7</sup> Direct current.

s, pawls, ratchets, and winch-  
on which we quote two hun-  
dred and ninety-five dollars (\$295.00)  
Dayton, Ohio.

Some time ago we sold to a  
company a 7 x 10—20 H.P.

Lambert engine with foot  
s, ratchets, and pawls. The  
company has completed the job on  
this engine was used and  
I like to return it to us. It is  
in very good operating condition and  
we put it into service without re-  
pair. It was in use up until  
four weeks ago. The gears,  
shaft pinions, and brasses are  
in good condition. If you can  
buy this engine as it is, we could  
offer you a price of two hundred  
and five dollars (\$265.00) f.o.b.  
shipping point, which is about sixty  
dollars from Philadelphia. We origi-  
nally sold this engine for \$350.00.  
You can use it for at least four or five  
years without making any repairs  
over on it.

Kindly let us know if any of these  
prices will meet your requirements.

Yours truly, (298)

9

Tool Co.,  
Concord, N. H.  
Attention:

One of our recent products is the  
2B Edlund Sensitive Drilling  
Machine shown in the accompanying  
illustration. Machines of this type  
are built in combinations of from  
two to six spindles, and are equipped  
with ball bearings to provide for  
smooth operation at high speed. All changes

of speed may be made from the oper-  
ating position without requiring  
the machine to be stopped. Power  
is transmitted from the driving pulley  
through two bevel gears and a ver-  
tical shaft at the rear of the ma-  
chine to a four-step cone pulley,  
from which an open endless belt  
drives the cone pulley at the  
front of the machine.

The spindle is made of high car-  
bon steel and is provided with two  
driving splines fitted into grooves on  
opposite sides of the spindle. Both  
the spindle and cone pulleys are care-  
fully balanced, which is an im-  
portant factor in adding to the sen-  
sitiveness of the machine and its  
freedom from vibration when run-  
ning at high speeds. A small reser-  
voir is provided at the top of the  
spindle sleeve, which contains a  
sufficient volume of oil to lubricate  
the bearings without the need of fre-  
quent attention.

The spindle sleeve is made of  
gray cast-iron and is accurately  
reamed on the inside and ground on  
the outside. The stop-collar is pro-  
vided with an adjustable depth  
screw. The sliding arm has a bearing  
9 inches in length upon the surface of  
the column, and is fastened to the  
column with a bolt at the upper end,  
which is so adjusted that raising  
and lowering of the arm is accom-  
plished by simply unlocking the  
clamping lever on the lower end of the  
arm, without requiring the use of a  
wrench.

Four speed changes are provided,  
the belt-shifting device being oper-

ated by a rack and pinion controlled by means of a handle at the left side of the machine, which is located within easy reach of the operating position. To change the speed the operator simply shifts the handle one-fourth turn. An adjustable idler pulley provides for taking up any slack that may exist in the belt.

When you are in the market for new drilling equipment, we request your consideration of this machine.

Yours truly, (374)

10

The Scarborough Manufacturing Co.,  
Cairo, Illinois.

Gentlemen:

We recommend that you include a Cochrane Metering Heater with the boiler and furnace equipment we are to install in your new plant.

The Cochrane Metering Heater utilizes exhaust steam from engines or pumps for boiler feeding and other purposes. The steam used in heating the water is condensed and added to it as distilled water, so that six pounds of cold water and one pound of steam will produce seven pounds of hot water. The heater serves as a receiver or hot well for conserving all water and steam about the plant suitable for boiler feed purposes, resulting in economy of both heat and water. Approximately one per cent. is saved for each 11° that the water is raised in temperature.

In addition to the benefits of utilizing the exhaust steam, the heater meters the water before it

is fed to the boiler, thus supplying means of determining the evaporator per pound of fuel. If this is to be low, the management will usually seek the cause, which may be inferior coal, unsuitable coal for type of grates and furnace used, proper methods of firing, air leakage through the boiler setting, soot scale on the tubes, or inefficient draft and improper handling of the dampers. The meter will show the gain in efficiency which results from the correction of such faults and will enable the management to keep a check on the economy of the plant.

In the Cochrane meter the weight is measured as it flows over a V-notch weir enclosed within the heater chamber. It is equipped with a Cochrane Recorder, which is a simple mechanical device by means of which the head of water on the weir is translated into pounds flow by a pen inscribing upon a chart mounted on a clock-driven drum. This recorder shows the rate of feed and records irregularities in the operation of the pump and the rate at which boilers are driven at different times during the day. An integrating device indicates the total amount of water used in any elapsed period.

We are sure the advantages including this meter in your equipment will be apparent. Mr. Miller will take the matter up with you personally when he reaches Cairo next week to supervise the installation of the boilers.

Yours very truly, (389)

## 11

Mr. L. C. Fernald,  
President, Union Switch & Signal Co.,  
Swissvale, Pa.

Dear Sir:

During the past three months we have been compelled to decline to quote on not less than \$500,000 worth of new business because with our present equipment we were not in a position to handle it. I have discussed the situation with our superintendent and sales manager. We decided to recommend the immediate installation of the following equipment, which will enable us to procure a considerable amount of remunerative commercial business.

| Equipment                                  | Price   | Delivery       |
|--|---------|----------------|
| 2 — 2000 lb. Erie Steam Drop Hammers       | \$16200 | 8 to 10 weeks  |
| 2 — 1500 lb. Erie Steam Drop Hammers       | 13760   | 10 to 12 weeks |
| 1 — # 57 Toledo Press                      | 3620    | 8 to 10 weeks  |
| 1 — 5" Ajax Forging Machine                | 23075   | 5 months       |
| 1 — # 56 Toledo Presses                    | 5100    | 8 to 10 weeks  |
| 1 — # 5 Becker Milling Machine, cone-drive | 3145    | 4 to 5 months  |
| 1 — # 3 Pratt & Whitney Milling Machine    | 1600    | 3 months       |
| 1 — 24" Gould & Everhardt Shapers          | 3000    | 2 months       |
|  | \$69500 |                |

The above prices do not include freight or installation, which we estimate will involve an additional expense of \$10,000, making a total of \$79,500.

We are in urgent need of the 5" forging machine as it is essential for large work done on the 6000-lb. steam drop hammers. Without it the range of work at we can take will be limited. The drop forge business is full of promise. The demand exceeds the supply. The tractor business in particular is growing rapidly. To handle the business we have in mind it will be necessary for us to install the additional hammers listed above, but when they are in operation we could release and sell two of the 2000-lb. Chambersburg Board Drop hammers.

We recommend that sand-blasting equipment be installed in the forge shop at an early date. The cost of such equipment will not exceed \$5000. This investment will afford much needed facilities and make possible better deliveries. At present we are compelled to use the foundry facilities for work requiring sand-blast treatment, which involves a considerable expense in handling back and forth from one shop to another.

We should also plan for increased heating facilities to take care of our large hammer product. We are now having plans drawn for a building to be

used entirely as a heat treating plant. This requirement of the business must be taken care of at an early date because it controls the amount of work we can handle on the large hammers. Early consideration should also be given to the equipment of a new die room.

When the new equipment we recommend is installed we can bill out \$250,000 worth of business per month, or \$3,000,000 per year. On our present percentage of profit we could pay for the equipment within five to six months, but payment on it would not begin for several months and would be distributed over a period of six months.

Respectfully submitted, (553)

12

economical and convenient methods of transmitting power by direct-connected motor machines saving the loss in friction which accompanies transmission by belting and shafting have been applied to the baush pipe cutting and threading machines the compact cabinet base requires no more room than a bench machine the motor is concealed within the base protecting it from oil or chips and from breakage resulting from dropping heavy lengths of pipe and fittings the machine can be moved from place to place and it is only necessary to attach the feed wires and turn on the switch to have it ready for use when it is not in use you are not paying for wasted power since no belting or counter-shaft are used a trolley over the machine for handling heavy lengths of pipe can be used to advantage the machine has triple compound spur gears cut

from solid castings and entirely protected various speeds can be obtained or the machine can be started or stopped by simply throwing a lever the motor remaining in operation the oil pump driven by gears is out of the way of the operator and direct-connected the strainer in the side of the pan separates the oil from the chips and allows the oil to be used over and over again the machine is equipped with specially designed die-head which does away with all thumb screws for adjusting the dies it has a self-centering device the dies are adjustable to any fittings and an adjustable shell takes up the wear all sizes above three inches are furnished with an automatically fitted blade cut-off attachment which cuts pipe square and without leaving a burr making the reaming of the pipe unnecessary we shall be pleased to furnish further information and prices yours very truly

OFFICE TRAINING ASSIGNMENTS

You are employed by the Baush Machine Tool Co., Buffalo, N. Y. Your teacher is the sales manager. All correspondence is signed with the company name only.

TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

ARRANGEMENT

Before taking a letter from the machine, always read it through carefully for possible errors. This is particularly necessary in technical correspondence containing dimensions like those in the style letter. Corrections are much more easily made while the sheet is still in the machine than after it has been removed.

**Assignment 1.** Copy the style letter with carbon on form 32 and present for signature.

| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">CLASS OF SERVICE</th> <th style="text-align: left;">SYMBOL</th> </tr> <tr> <td>Day Message</td> <td>Dis</td> </tr> <tr> <td>Day Letter</td> <td>Dis</td> </tr> <tr> <td>Night Message</td> <td>Nite</td> </tr> <tr> <td>Night Letter</td> <td>N L</td> </tr> </table> <p><small>If none of these three symbols appears after the check (number of words) this is day message. Otherwise its character is indicated by the symbol appearing after the check.</small></p> | CLASS OF SERVICE | SYMBOL | Day Message | Dis | Day Letter | Dis | Night Message | Nite | Night Letter | N L | <h1 style="margin: 0;">WESTERN UNION</h1> <h2 style="margin: 0;">TELEGRAM</h2> <p style="font-size: small; margin: 5px 0;">NEWCOMB CARLTON, PRESIDENT      GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">CLASS OF SERVICE</th> <th style="text-align: left;">SYMBOL</th> </tr> <tr> <td>Day Message</td> <td>Dis</td> </tr> <tr> <td>Day Letter</td> <td>Dis</td> </tr> <tr> <td>Night Message</td> <td>Nite</td> </tr> <tr> <td>Night Letter</td> <td>N L</td> </tr> </table> <p><small>If none of these three symbols appears after the check (number of words) this is day message. Otherwise its character is indicated by the symbol appearing after the check.</small></p> | CLASS OF SERVICE | SYMBOL | Day Message | Dis | Day Letter | Dis | Night Message | Nite | Night Letter | N L |
|---|------------------|--------|-------------|-----|------------|-----|---------------|------|--------------|-----|--|---|------------------|--------|-------------|-----|------------|-----|---------------|------|--------------|-----|
| CLASS OF SERVICE  | SYMBOL           |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Day Message   | Dis              |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Day Letter  | Dis              |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Night Message   | Nite             |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Night Letter  | N L              |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| CLASS OF SERVICE  | SYMBOL           |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Day Message   | Dis              |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Day Letter  | Dis              |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Night Message   | Nite             |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |
| Night Letter  | N L              |        |             |     |            |     |               |      |              |     |  |   |                  |        |             |     |            |     |               |      |              |     |

RECEIVED AT EQUITABLE BLDG.      1919 DEC 11 AM 8 05

A 7 32 AM DEC 11 COLLECT FROM ROCHESTER NY

BAUSH MACHINE TOOL CO

BUFFALO NY

YOUR LETTER TENTH ACCEPT AT PRICE QUOTED SHIP

MACHINE IMMEDIATELY

BROWN & SHARP MFG CO

TELEPHONE NO 3848

TELEPHONED TO *C. H. R. H. H. H.*

TIME DELIVERED *8:15 am*

BY *H. H. H.*

ATTEMPTS TO DELIVER

ILLUSTRATION 30—TELEGRAM

TELEGRAMS

The essential qualities of a telegram are brevity and clearness. The minimum charge for a telegram to any point is based on ten words, exclusive of the address and the signature of the sender. Rates on night messages are lower than on those sent by day. For an additional charge of one-half of the original cost, a telegram will be "repeated"—that is, telegraphed back to the original office for verification.

In addition to the full-rate expedited service, "Day Letters" and "Night Letters" may be sent by telegraph. Day Letters are forwarded at rates lower than the standard telegram rates, and their transmission and delivery are subordinated to the transmission and delivery of regular telegrams. Night Letters are accepted up to 2 A. M. for delivery on the morning of the ensuing business day at rates still lower than standard night message rates.

In writing telegrams, figures should be spelled out as shown in the facsimile telegram. For telegraphic purposes many business houses use private code systems by which one word is made to stand for a number of words.

**Assignment 2.** Write the following telegrams in duplicate on form 33. Use plain paper for the carbons. Present for approval.

1. To the Toledo Manufacturing Co., Toledo, Ohio.

Delivery our order September second steam hammer number four urgently required. Wire forwarding date.

2. To the Ajax Forging Co., Birmingham, Ala.

Our order fourteen twenty parts one six five dash one six six dash one six seven missing on machine one four six unloaded today. Ship by express immediately.

#### MACHINERY SPECIFICATIONS

We have a number of machines in our plant which were installed for work on special products. Since the work involving the use of these machines has now been completed, we desire to dispose of them. The plant superintendent has drawn up the following descriptive specifications.

#### Twelve 6A Automatic Model 2 Potter & Johnson Lathes with Oil Pan and Oil Pump Specifications

##### Headstock

Gear Automatic Speed Changes, 3

Set of Spindle Change Gears

Spindle, Single Drive through Gears

Gear Feeds, Fine, Medium, and Auxiliary

Hole through Spindle,  $4\frac{1}{2}$ " diameter

Cross Slide, Adjustable Longitudinal on Bed

Turret and Turret Slide

Turret, 4 Stations

Turret Indexed on Advancing and Returned Automatically

Turret Travel, 12"

Turret across Flats, 10"

turret Holes,  $2\frac{1}{2}$ "

drilling device through turret to force oil through drill or turret tools. This is operated through hole of turret face only.

Countershaft

Driving and Loose Pulleys, 12" diameter

Driving Pulley, 16" diameter

Driving Pulley on Machine, 15" diameter

Shaft, 4"

Four Warren Automatic Hydraulic Nosing Lathes  
for Roughing the Nose of 5" H. E. Shell  
Specifications

Spindle Diameter, 9"

Spindle Speed, 41 R. P. M.

Back Gear Ratio, 1 to 21

Driving Pulley Speed, 850 R. P. M.

Driving Pulley Diameter, 12"

Driving Pulley Face, 7"

Power required, 25 H. P.

Shipping Weight, 6,000 lbs.

Overall Length, 12'

Overall Width, 50"

Overall Height, 56"

Number of Feeds for all tools, infinite.

Collet Capacity, 5" diameter

Tools are of  $\frac{1}{2}$ " square steel

Machine is single belt drive direct from line shaft

Shaft, 4"

Machines consist of 9" Spindle rotated by double back gears having a ratio of 1 to 21 and fed axially by oil pressure directly back of spindle.

The Collet is of the draw-in type operated by hydraulic pressure, holding the shell very rigid.

Tools are mounted on a heavy swing arm, pivoted and swung out of way to allow shell to be placed in collet and taken from collet when finished.

Time for operation, 2 minutes, floor to floor.



**Assignment 3.** The manager asks you to get out fifty copies of these specifications. Cut stencils and run them off on the mimeograph.

#### ROUGH DRAFT

The Pan-American Machinery Supply Company has asked us to submit complete specifications on a special engine. The manager has dictated the specifications and after going over the typewritten draft finds that a number of changes and additions must be made as indicated on form 34.

**Assignment 4.** Make a copy with carbon of these specifications, correcting any errors in spelling which the manager may have overlooked.

#### INVENTORY

Below is given an inventory of small parts on hand in the stores room of our gasoline engine department on this date.

#### INVENTORY OF MATERIALS ON HAND, JULY 30, 1920.

| Pattern No. | Part                            | Quantity |
|-------------|---------------------------------|----------|
| C- 1        | Cylinder castings               | 644 lbs. |
| C- 7        | Cylinder head castings          | 196 "    |
| C- 10       | Main bearing forgings           | 151 "    |
| C- 12       | Flywheel castings               | 537 "    |
| C- 18       | Flywheel hub cap castings       | 30 "     |
| C- 19       | Piston castings                 | 87½ "    |
| C- 20       | Piston rings                    | 35       |
| C- 46-S     | Flange coupling castings        | 24 lbs.  |
| C- 46-E     | Flange coupling castings        | 26½ "    |
| C- 48       | Hand hole plate castings        | 42 "     |
| C- 49       | Bottom plate castings           | 22½ "    |
| C- 92       | Exhaust fitting castings        | 35 "     |
| C- 93       | Exhaust fitting flange castings | 37 "     |
| C- 95       | Inlet fitting castings          | 12 "     |
| C- 99       | Transfer port cover castings    | 35½ "    |
| C-107       | Pump plunger rod guides         | 24½ "    |
| C-109       | Eccentric forgings              | 20½ "    |
| C-113       | Overflow pipe flange castings   | 31½ "    |

INVENTORY—*Continued*

| Item No. | Part                            | Quantity              |
|----------|---------------------------------|-----------------------|
| 34       | Shutter valve cover castings    | 54 lbs.               |
| 31       | Shutter valve seat castings     | 65 "                  |
| 33       | Shutter valve lever castings    | 45                    |
| 59       | Igniter spring support castings | 35                    |
| 13       | Starting handles                | 25                    |
| 25-A     | Connecting rod boxes            | 87 $\frac{1}{4}$ lbs. |
| 25       | Connecting rod caps             | 45 $\frac{1}{2}$ "    |
| 32       | Main bearing bushings           | 10                    |
| 35       | Eccentric rods                  | 10 lbs.               |
| 39       | Pumps                           | 16 $\frac{1}{4}$ "    |
| 41       | Pump plungers                   | 26 $\frac{1}{4}$ "    |
| 40       | Pump nuts                       | 73 "                  |
| 08       | Check valve caps                | 47 $\frac{1}{4}$ "    |
| 69-R     | Lead ratchets                   | 81 $\frac{1}{2}$ "    |
| 76       | Oil pipe clamps                 | 45                    |
| 12       | Pump discharge pipes            | 26 $\frac{3}{4}$ lbs. |
| 31-A     | Ring oilers                     | 43 $\frac{1}{4}$ "    |
| 30       | Shutter valves                  | 32 $\frac{1}{2}$ "    |
| 30       | Check valve cages               | 27 "                  |
| 24       | Connecting rods                 | 78 $\frac{1}{2}$ "    |
| 52       | Rotating electrode levers       | 55                    |
| 21       | Wrist pins                      | 45                    |
| 31       | Crank shafts                    | 65                    |
| 54       | Rotating electrodes             | 25                    |
| 94       | Check valves                    | 42 $\frac{3}{4}$ lbs. |

**Assignment 5.** Copy the inventory with two carbons.

## REQUISITIONS

When materials are required in any department of our plant, a requisition similar to that shown on page 242 is made out and sent to the storeroom department where supplies are kept.

**Assignment 6.** On form 35 make a copy of this requisition. Present work for approval.

Form 99

## REQUISITION ORDER

Requisition No. 812 For Production Order No. 567 Date August 15 1920

STOREKEEPER: Deliver the following materials to the factory foreman for which this shall be your receipt, which you will pass to the stores clerk.

| NUMBER REQUIRED | DESCRIPTION                                    | SIZE         | WHERE USED        | PRICE  | AMOUNT |
|-----------------|--|--------------|-------------------|--------|--------|
| 30              | Oil cups - double feed                         | D. F. #1     | Crank & oyl. lub. | 95     | 28 50  |
| 60              | Compression grease cups                        | 1/4          | Shaft bearing     | 20     | 12 00  |
| 30              | Priming cups                                   | 1/8          | Cylinder          | 16     | 4 80   |
| 90              | Drain cocks                                    | 1/8          | Pump              | 08     | 7 20   |
| 37 1/2 ft.      | Copper tubing                                  | 1/4          | Crank & oyl. lub. | 07     | 2 63   |
| 60              | Compression cups                               | 1/4          | "                 | 18     | 10 80  |
| 30              | Elle   | 3/8          | "                 | 01 1/2 | 45     |
| 30              | Nipples  | 3/8 x 1      | "                 | 01     | 30     |
| 60              | Couplings                                      | 1/4          | Bearings          | 01     | 60     |
| 60              | Wire connectors                                |              | Igniters          | 08 1/2 | 2 10   |
| 30              | Lead springs                                   | 7/16 x 2 1/2 | "                 | 01     | 30     |
| 30              | Upper trip springs                             | 7/16 x 2 1/2 | "                 | 01     | 30     |
| 30              | Lower trip springs                             | 7/16 x 2 1/2 | "                 | 01     | 30     |
| 30              | Trigger springs                                | 3/16 x 1 1/2 | Trigger rod       | 00 1/2 | 15     |
| 30              | Starting handle springs                        | 3/16 x 2     | Starting handle   | 00 1/2 | 15     |
| 30              | Inlet valve springs                            | 7/16 x 2     | Inlet valve       | 00 1/2 | 15     |
| 60              | Igniter points                                 |              | Igniter           | 04     | 2 40   |
| 30              | Eccentric keys                                 |              | Eccentric         | 01     | 30     |
| 30              | Ball thrust bearings                           | 7/16         | Crank shaft       | 85     | 25 50  |
| 30              | Collars  |              | Inlet valve       | 04     | 1 20   |
| 30              | Taper pins                                     | 3/4          | "                 | 01     | 30     |
| 30              | Wash plates                                    |              | Cylinder head     | 11     | 3 30   |
| 60              | Shims  |              | Eccentric strap   | 00 1/2 | 29     |
| 300             | Gaskets  | 1/16         | Hand hole plate   | 01 1/2 | 4 50   |
| 30              | Carburetors                                    | Model B      | Inlet fitting     | 4 85   | 145 50 |
| 30 sets         | Cap and set screws, bolts, nuts, washers, etc. |              |                   | 1 15   | 34 50  |
|                 |  |              |                   |        | 289 53 |

Delivered 8/16/20  
 Clerk - stores clerk

Rec'd 8/16/20  
 W. O. Keppel  
 Supt.

OK  
 Charles Smith  
 Foreman

ILLUSTRATION 31--REQUISITION

## PUNCTUATION AND PARAGRAPHING

**Assignment 7.** After deciding on the punctuation and paragraphing letter 12, write the letter to the following:

Wilcox Machinery Supply Co., 462 Wood St., Willimantic, Conn.  
Ransom Machinery Co., South Bend, Ind.

## TRANSCRIBING

**Assignment 8.** The sales manager will dictate to you five letters from his correspondence for transcription. Present all your letters for signature.

## FILING

**Assignment 9.** File the carbon copies of the letters and telegrams you have written in the alphabetic-numeric file. The carbon of the memorandum to President Fairchild is to be filed under his name.

## SECRETARIAL PRACTICE

**Assignment 10.** This morning we received from the printer a few copies of our new catalog. Send one to the Carey Machinery & Supply Co. (letter, page 6) and call their attention to the fact that the milling machine about which we wrote them is fully described and illustrated on page 46.

**Assignment 11.** We carry an advertisement in the "Machinery World" (see letter 1). This morning there is a letter from them enclosing a contract blank for the next twelve issues. The sales manager: "I've signed this contract. I notice we have had a number of inquiries recently through this magazine, some of which have resulted in sales. Write them a nice letter."

**Assignment 12.** The sales manager: "We'll send out these machinery specifications (see pages 238 and 239) to a number of forging companies. Get me a letter to go with the specifications. Quote the Potter & Johnson Lathes at \$180 and the Warren Automatics at \$560. You know our regular terms (2% 10 days, net 30 days, f.o.b. our works). Explain that we used these machines in the manufacture of 4.5 and 5" shells. Johnson (the shop foreman) says none of them were used more than six months and that they are all in first-class operating condition."

**Assignment 13.** The sales manager: "You remember the Walker Tool Co. (see letter 5) purchased several Gray planers from us last year. I see here is a letter from them this morning enclosing a copy of the letter they wrote in reply to an inquiry from the Schuylkill Manufacturing Co. (Letter 6.) Write them a nice letter thanking them for the recommendation and asking if they will be subject to our using their letter in that little circular we are going to publish."

# TURNER CONSTRUCTION COMPANY

ENGINEERS & CONTRACTORS

## REINFORCED CONCRETE CONSTRUCTION

RANSOME SYSTEM

H. C. TURNER, C. E., PRESIDENT  
FRED E. KNAPP, VICE PRES. & TREASURER  
D. W. THOMAS, C. E., GENERAL SUPERINTENDENT  
A. M. CHAPMAN, SECRETARY  
J. CHAS. ANDREWS, ASST. TREASURER

EXECUTIVE OFFICES  
57<sup>th</sup> FLOOR FIRST-SECOND NATIONAL BANK BUILDING

TELEPHONE 704-4286

ST. LOUIS, MO., February 16, 1920

Mr. L. K. Knapp,  
Pres., Missouri Water & Electric Co.,  
St. Louis, Mo.

Dear Sir:

We propose to do the following work on the Babcock Reservoir for the Missouri Water & Electric Company as per plans and detailed specifications which you will furnish us.

Excavation of earth and loose rock including grubbing, top soiling, placing and rolling embankment, replacing top soil, and seeding and wasting excess material for the sum of Forty Cents (40¢) per cubic yard.

Excavating and hauling clay from the Crocker property on Highland Road near the railroad as shown on your blue print #622 to the reservoir at the actual cost, counting teams at the rate of \$10.00 per day of 10 hours and labor at \$3.50 per day.

Hauling, dumping, and leveling surplus dirt for the reservoir site to and at the junction of Highland Road and South Avenue, as shown on blue print #622 included in the price of excavation mentioned above.

Hauling, dumping, and leveling surplus dirt for back filling the clay removed from the Crocker property as shown on blue print #622 at the actual cost over and above the cost which would be incurred if this dirt were dumped at Highland Road and South Avenue, such cost to be figured at \$10.00 per day for double teams, and labor at \$3.50 per day of 10 hours.

Excavating solid rock as defined in the specifications at One Dollar (\$1.00) per cubic yard; also placing, consolidating, and rolling clay in the slopes of the reservoir for rip-rapping at Twenty-five Cents (25¢) per cubic yard.

Payments are to be made to this company once a month on receipt of estimate from the Missouri Water & Electric Company, the payment being based on 85% of the engineer's estimate. The remaining 15% is to be paid within thirty days after completion and acceptance of the work.

As a guarantee on our part that we will carry out our agreement, we will furnish bond in the sum of Ten Thousand Dollars (\$10,000).

Very truly yours,

TURNER CONSTRUCTION COMPANY.

*A. M. Chapman*  
Secretary.

AWC\*EMB

## BUILDING AND CONTRACTING SECTION

### TECHNICAL TERMS

- ignment**—the state of being in line and true to dimension.
- lin**—short upright pieces to which laths are nailed.
- halt**—a composition of pitch, lime, gravel, etc., used for pavements and roads called also *asphaltum*.
- filling**—the act of filling an excavation with ground taken out in the process of excavating.
- m**—a bank or ledge.
- e-print**—an impression of a drawing or plan on specially prepared “blue-process” paper.
- khead**—a partition built in a tunnel, intended to prevent the passage of water.
- stress**—a structure built against a wall for the purpose of giving it stability.
- crete**—an artificial stone composed of sand, broken stone, and cement.
- duit**—a pipe, tube, or other underground channel for conveying water or other fluids, or protecting underground wires and cables.
- vert**—an arched drain of brickwork or masonry built under a road for carrying off water.
- tilage**—a legal term for the land occupied by a dwelling.
- lection**—the bending of material under a strain, as of a beam under the weight of a load.
- stile**—capable of being drawn out; flexible; pliable.
- avation**—the act of digging out.
- ence (fa-yens’)**—a kind of glazed tile used for fine building work.
- icet**—a valve in a pipe or receptacle controlling the flow of liquid.
- vanize**—to coat sheets of iron with tin by a chemical process.
- der**—a main beam of wood or iron used to support a superstructure.
- molithic**—trade name for a certain type of concrete sidewalk.
- erstices**—small narrow spaces between stones, etc.
- st**—one of the timbers to which the boards of a floor or the laths of a wall or ceiling are nailed.
- dscapeing**—the art of laying out grounds and arranging trees, shrubbery, paths, etc.
- tice**—work with open spaces formed by crossing or interlacing laths, bars, or strips of wood or metal.
- acadam**—a process of road-making by means of crushed stone. A road so constructed is said to be *macadamized*.
- nhole**—a hole through which a man may enter a sewer, drain, or the like for the purpose of cleaning or repairing.
- diation**—the emission and diffusion of heat or light.

- rafter**—one of the beams which give the slope to a roof and to which the laths are nailed.
- reinforced**—strengthened by an additional thickness, support, or other means.
- riprap**—broken stone used for roadbeds and foundations.
- rubble**—rough stone of irregular shapes and sizes.
- scaffolding**—a frame for the support of workmen and materials during construction of buildings, etc.; also the material, such as lumber, used for making scaffolds.
- scantling**—a small beam.
- shoring**—posts or beams of timber or iron set against a building or wall for temporary support during construction.
- sluice**—an artificial trough or channel for running off water.
- stanchion**—a post, pillar, or beam used as a support.
- stud**—a small upright beam or scantling upon which laths are nailed.
- subcontractor**—one to whom the principal or general contractor sublets a part of the contract.
- Telford**—a special process of road-making named after the inventor.
- terra cotta**—a hard tiling made for use as a building material, of much finer quality and harder-baked than brick.
- tiling**—a thin sheet of baked clay used on roofs, floors, etc.; baked clay pipe for constructing drains, etc.
- topography**—a detailed description of a locality or tract of land, including its natural and artificial features.
- vitriified**—a term applied to building material such as brick, the substance of which has been made hard and glazed by exposure to heat.
- weep holes**—holes for draining off water.

## CORRESPONDENCE

I

The National Mantel & Tiling Co.,  
4246 Dover St.,  
Camden, N. J.

Gentlemen:

With reference to the faience tile fountain which you intend to set up temporarily on the south wall of | the Franklin Lunch Room, you are notified that the fountain was examined by the writer this morning at the building | and it is hereby condemned<sup>1</sup> as not being in accordance with the full size detail drawings fur-

nished you; neither | is it in keeping with the rest of the interior of this room.

You are instructed to set up the | fountain as shown in our details with as little delay as possible. Inasmuch as this lunch room is to be | <sup>100</sup> opened on April 15, it will be necessary for you to furnish a temporary basin, and I will permit the | use of the basin sent by the manufacturer for this purpose only.

In view of the fact that the remainder | of the faience tile work in

<sup>1</sup> That is, rejected by the architect.

uilding has been so satisfactorily  
I regret very much that it is |  
ary for me to reject the present  
in. However, it does not come  
) specifications. I trust that  
will do everything in your  
to hasten the completion of  
ork.

Yours truly, (195)

2

h Clayton, Esq.,  
122 East Royal Ave.,  
Independence, Kansas.

Sir:

In re Conway Building  
as explained to you by telephone  
orning I do not approve of the  
roofing which is being put on  
bove building by Edward G.  
ns & Company because of the  
| weight of the paper and the  
of composition used. I have  
nstructed their<sup>2</sup> foreman to put  
p | of the four layers of paper  
sphaltum composition now on  
oof, two layers of 36" wide, |  
und paper of the quality used  
ie Reliance Company. These  
will be lapped so that there  
<sup>100</sup> be two thicknesses over the  
it materials all over the roof.  
: additional layers are to be  
ughly mopped in | the usual  
er with hot straight run Ameri-  
oal Tar instead of the asphaltum  
osition previously used by Ste-  
& | Company. The slag, of  
e, is to be put on top of these  
s.

Their superintendent was willing  
to put | on the above additional ma-  
terial in order to secure my approval  
on the roofing as soon as I stated that  
| this type of roofing would be con-  
sidered as complying with the specifi-  
cations.

Very truly yours, (195)

3

Mr. K. C. Jennings,  
572 Steiner St.,  
Lebanon, Pa.

My dear Sir:

Pursuant to our recent telephone  
conversation we give you below ten-  
tative specifications covering the car-  
penter work only | on the dwellings  
you are erecting on North Madison  
Street.

"All framing lumber to be  
sound, dry, straight grained  
hemlock | free from defects  
which impair its strength or  
durability. Cellar girders to  
be made of four thicknesses  
of 2 | x 10" joists and 2 x 4"  
studs firmly spiked together  
and bolted with  $\frac{3}{4}$ " bolts  
every | 4 feet. They will  
be set on 6 x 6" locust or oak  
posts or Buffalo stanchions  
and be | <sup>100</sup> joined only at  
the posts. All joists to be  
2 x 10", spaced 16" centers,  
with two rows | of lattice  
bridging to each span.

Rafters to be 2 x 6",  
spaced 16' centers. Cellar  
beams 2 | x 6" spiked to  
each rafter.

<sup>1</sup> In business correspondence the plural form of the pronoun is often used when the antecedent is the  
of a company.



All studs in outside walls and partitions to be 2 x 4", all spaced 16" centers and partitions bridged half way up. Ashlins to be 2 x 4" and under each rafter. Joists to be double at stairs, fire places, and under partitions, with double studs at corners and openings. <sup>200</sup>

All stud partitions to have double 2 x 4" sills and caps. Sills of houses to be three 2 x 10", spiked together. Porch ceiling joists and rafters to be 2 x 6". Porch floor joists to be 2 x 8", spaced 12".

If these specifications meet with your approval, kindly let us know as soon as possible. We understand that work on the foundation will have progressed sufficiently by June 28 to make it possible for us to begin work at that time.

Very truly yours, (293)

4

Mr. W. F. Williams,  
Chief Engineer, St. Louis Terminal Railway Co.,  
Wabash Building,  
St. Louis, Mo.

Dear Sir:

In reply to your letter of the 8th, we quote you the following prices for concrete tunnel lining: |

Fellows Tunnel, New Alexandria Station, approximately

900 lineal feet of concrete lining, Nine and 50/100 Dollars (\$9.50) per | cubic yard.

Hunter Tunnel, about two miles west of New Alexandria Station, approximately 575 feet long, Eight | and 25/100 Dollars (\$8.25) per cubic yard.

Oliver Tunnel, 600 feet west of Hunter Tunnel, approximately 340 | feet long, Eight and 25/100 Dollars (\$8.25) per cubic yard.

For any trimming of sides and | <sup>100</sup> rock, at such points as you propose to use rock instead of concrete side walls, Four Dollars (\$4.00) per cubic yard; | or at your option our charge will be based on the actual cost of labor plus fifteen (15) per cent. for | the use of the tools for the necessary trimming.

For such three-inch pipe for weep holes as may be | required, Twenty-five Cents (25¢) per lineal foot.

It is understood that your company will furnish free transportation for men and | materials over your lines. The work is to be done in accordance with your specifications and under your direction. We | <sup>200</sup> have a large force of men idle at the present time and could commence this work at once and rush | it to completion.

Yours very truly, (226)

5

the Harlan & Hollingsworth Corporation,  
Marion, Indiana.  
Gentlemen:

Your letter of July 20 has been brought to the writer's attention this morning. We note that the job you wish to have done covers the excavation of our ball park and the paving of the alley and sidewalk in the rear of the park.

We have inspected the park and now name you a price of 33¢ per cubic yard for the proposed excavation. The material is to be deposited in accordance with the plan explained by Mr. Sawyer. You will understand that this bid does not include any landscaping, but covers only the excavation and deposit of material. We have a complete excavating outfit, including a steam shovel, locomotive, and cars, with which we can start this operation at once.

The total area of the alley to be paved with asphalt is approximately 445 square yards. Based upon standard city specifications for this work we submit the following prices:

|                       |                    |
|-----------------------|--------------------|
| Sub-grade             | \$ .55 per cu. yd. |
| Sandstone curbing     | .78 per lin. ft.   |
| Asphalt paving        | 2.35 per sq. yd.   |
| Brick paving          | 2.25 per sq. yd.   |
| Granolithic sidewalks | .19 per sq. ft.    |

If these prices are satisfactory, kindly inform us at once and we will draw up detailed specifications to cover the job and submit them to you. If we are awarded the contract, we can begin the paving by September 15.

Yours very truly, (243)

6

r. M. C. Davidson,  
1522 Lafayette St.,  
Denver, Colo.

Dear Sir:

In reference to the elevator proposal submitted to you for the Watson Street warehouse of the L. W. Berdeen Company, we now confirm our verbal quotation of \$1540.00 for placing the elevator machinery in the pent house over the elevator shaft.

The machine will be our direct-connected type, with motor con-

nected to the worm shaft of the winding machine. No external gears will be necessary for obtaining the required elevator speed with a high-speed motor.

The winding machine and motor will be self-contained on heavy cast iron base. The worm gear will be of phosphor bronze cut from solid steel. The worm and worm shaft will be made of one solid forging from the best crucible steel. The winding machine will be equipped throughout with all modern appliances.

The motor will be | 6½ H.P. of the slip-ring type, speed not to exceed 720 R.P.M. | This motor is manufactured by the Burke Electric Company of Erie, Pa., and is guaranteed to have a lower | running current than any other elevator motor on the market. We have installed more than five hundred of these motors | <sup>200</sup> ranging from 3 to 30 H.P., and have adopted them as our standard A.C.<sup>3</sup> motors. The controller will | be of the semi-magnet type, arranged for cutting in the current in three steps and is guaranteed to be | of the highest efficiency.

Our price includes the electric wiring at the motor and controller, but does not include running | the mains from the service box to the pent house.

Yours very truly, (273)

7

Turner Construction Co.,  
St. Louis, Mo.  
Gentlemen:

The State Highway Department does not specify that any particular kind of stone shall be used in Telford construction. | The bidder, however, is required at the time his bid is filed to state the kind of stone he proposes | to use and its location. The specifications for road work are uniform irrespective of the kind of stone which the | contractor uses.

On the proposed Lincoln Highway roadbed the specifications require that the bottom course shall extend eight feet on | each side of

<sup>3</sup> Alternating current.

the center line, the stones composing the course to be nine to twelve inches long, three to | <sup>100</sup> five inches wide, and five inches deep, placed vertically by hand on their broadest edges. It is always required that | the stones be laid in lengthwise courses across the road and all interstices filled with rock and stone wedged with | a hammer. All projecting points must be broken off to bring the surface of the stone true to grade. The | course is then to be thoroughly rolled with a roller until the stone does not rock under the roller.

After | completion of the bottom course, the second course of loose crushed stone six inches deep is applied. This stone must | <sup>200</sup> be screened to a minimum size of three-quarters of an inch and a maximum size of one and a | half inches.

The standard specifications for the finishing course require that the material be composed of rock screenings at least | fifty per cent. of which must be one-half to one-quarter inch in size. For the second and top | courses trap rock or good hard blue limestone must be used. Any good hard native stone can be used for | the Telford course.

Yours truly, (285)

8

Mr. L. F. White,  
Supt., American Trestle Co.,  
Mt. Carmel, Pa.

Dear Sir:

We have your letter of April 22 in which you inquire about the per-

used changes in the Standard specifications for bridges which have recently been approved by the State Highway Department. These changes have been limited to paragraphs 6 and 7 specifying the quality of iron and steel to be used. These two paragraphs now read as follows:

6—Iron

“All wrought iron shall consist of the best American double-refined iron, tough, ductile, and fibrous, with an ultimate strength of 50,000 pounds per square inch and an elastic limit of 20,000 pounds per square inch. Cast iron must be good tough pig metal of the best manufacture, well finished, true to dimensions, smooth and sound.

Only the best galvanized iron pipe, well finished, true to dimensions, smooth and sound, shall be used for the bridge railing. All exposed threads must be covered with white lead upon completion of the bridge. All joints must also be leaded. The ends of pipes must be covered with a cap or fitting.”

7—Steel

“Rolled steel shall be made by the open hearth process, of the grade known as medium, according to manufacturers' standard

specifications, and shall have an ultimate strength of 62,000 to 70,000 pounds per square inch, an elastic limit of not less than 35,000 pounds per square inch, and an elongation of 22 per cent. in eight inches. The finished product shall be true to size and shape, and free from imperfections such as injurious seams, blisters, buckles, cinder spots, or imperfect edges. Old material passing this specification and having sufficient section, or new material which is sufficiently straight to allow perfect embedding in concrete, may be used upon written acceptance by the State Highway Commissioner.”

We trust that this will give you the information for which you ask.

Very truly yours, (313)

9

Mr. Max Bruce,  
American Aluminum Co.,  
Lansing, Mich.

Dear Sir:

We have made an inspection of your apartment building at Watson and Brownfield Avenues and wish to submit the following propositions for additions and alterations to the heating system:

Proposition 1. We will furnish and connect a Monitor Heat Gen-

erator complete for the sum of \$22.50.

Proposition 2. We will enlarge the five radiators on the first floor, so as to provide 105 square feet of additional radiation, furnish the necessary piping and fittings, supply the labor, bronze the radiators, and extend the piping under the radiators so that connections can be made without making any further outlets. This work will be done for the sum of \$70.00.

Proposition 3. We will change the present system of piping in the basement so that it will be arranged on two separate circuits, one to supply the front of the apartment and the other the rear, install the 105 square feet of radiation suggested above, and connect the circuits to a boiler capable of carrying 1020 square feet of direct radiation. This work will be done for the sum of \$185, the old boiler to become our property.

At present you have 765 square feet of radiation in the building. With the 105 square feet which we suggest should be added you would still have a margin of 150 square feet in the heating capacity of the new boiler. Additional radiators could be installed without increasing your boiler capacity. The plan outlined in the third proposition is the best from an engineering standpoint. It is certain that the building will be satisfactorily heated, while on the other hand the plans outlined in the first and second

proposals are necessarily make arrangements.

Kindly let us hear from you in the near future. We shall be ready to proceed with the work by 20th.

Very truly yours, (325)

10

Mr. L. F. Rhodes,  
President, Griffin Road Construction Co.,  
Durham, N. C.

Dear Sir:

We have your letter of the 10th in which you request this office to state in detail the grading requirements which will form a part of our standard macadam and concrete specifications. These specifications are now being revised in the office of the State Highway Department but in the meantime I may give you the substance of the provision for grading contained therein.

The contractor is required to do all grading, either by cutting or filling as the case may be. He is called upon to remove from the way all trees, stumps, roots, fences, walls, buildings, or other encumbrances upon or in the way, and all spongy or unstable material, which must be replaced with solid material. In all cases where the earth fill exceeds one foot in depth, the filling must be deposited in layers, or courses, not exceeding one foot in depth, loose measurement. Each course shall be graded across the entire fill and t

ighly rolled before another course is  
 arted. The grading must conform  
 stakes placed by the State High-  
 ay Commissioner or | under his  
 rection. Where the total amount  
 cut exceeds the total amount of  
 l, the contractor is required to | <sup>200</sup>  
 e sufficient of the excess material  
 widen the berms in accordance  
 ith instructions issued by this  
 fice. The contractor | is required  
 provide a place for waste of any  
 excess material not used in widening  
 e berms.

The standard | specifications  
 ill call for a slope of one-half to  
 e inch to the foot from the center  
 the | sides, according to the per-  
 ntage of the grade of the road.  
 he side road is to conform to the  
 rface | grade of the completed  
 adbed, so that an unbroken slope  
 presented from the center to the  
 oulders or ditches | <sup>300</sup> on either  
 de.

In rock cuts the rock must be  
 blasted out at least eight inches be-  
 low the surface line | of the finished  
 sub-grade of the road. We are also  
 now requiring that rock used in fill-  
 ing must not | come within eight  
 inches of the surface line of the fin-  
 ished sub-grade, and must not be  
 allowed to nest, | but must be dis-  
 tributed so as to avoid pockets.

All old drain pipes, either iron or  
 vitrified, and all stone | used for  
 crossings belong to the township and  
 must be taken up and cared for by the  
 contractor unless otherwise | <sup>400</sup> di-  
 rected.

I trust that the above will give  
 you the information you need in  
 making your preliminary estimates.  
 The standard | specifications will be  
 published not later than March 15,  
 when a copy will go forward to you  
 immediately.

Yours truly, | (440)

11

ADVERTISEMENT  
 BOROUGH OF ETNA, PA.  
 TO CONTRACTORS

Sealed proposals for the improvement of Butler Street from the Baltimore &  
 Ohio Railroad Crossing to the borough line will | be received at the office of the  
 Borough Clerk until the fifth day of October at five o'clock P.M. |

APPROXIMATE ESTIMATES OF QUANTITIES

|                            |                      |
|----------------------------|----------------------|
| Excavation.....            | 60000 cubic yards    |
| New Curbstone.....         | 2000 lineal feet     |
| Ligonier Block Paving..... | 12000   square yards |

a. The Borough of Etna reserves the right to reject any or all bids, should  
 t deem it | for the interest of the Borough.

b. No contract shall be awarded to any person in arrears to the Borough  
<sup>100</sup> from any cause; or who may have, in former contracts with the Borough.

failed to perform work satisfactorily, either in the character of the work or in the time unnecessarily consumed in its completion by neglect or wilful delay.

c. The estimates shown above are to be considered and taken as approximate, and the right is expressly reserved by the party of the first part to increase or diminish the said quantities. Nor shall any change of grade or alignment vitiate, annul, or impair the contract made and entered into relative to said work, nor constitute any claim for compensation on account of prospective profits. The contractor shall be paid for the amount of work actually performed, at the rates specified in the proposal therefor and annexed to this contract as part thereof. The full measure of compensation to the contractor is to be determined by the Borough Engineer, whose final estimate of said work shall be conclusive evidence thereof, and of binding force.

d. The prices bid are to cover the furnishing of all materials entering into the construction of the work, and the necessary labor and tools required to perform the work in strict accordance with the plans and specifications.

e. Bidders will be required to accompany their proposals with a bond for one-half the amount of the estimated cost of the work, including all material, duly and legally executed by a security trust company. Such bond, before the contract shall be binding upon the Borough, shall first be approved by Council and shall be held as security for the payment of any difference between the sum to which the contractor would be entitled on the completion of the work at the price stated in the proposal, and that which the Borough of Etna may be obliged to pay to any bidder at any subsequent letting should the contractor refuse to sign the agreement or perform the work satisfactorily in accordance with the plans and specifications; with the further condition that the said Borough of Etna shall be indemnified against all losses, costs, and damages which may arise from the non-fulfillment of this contract in any manner whatever, or by reason of failure of any kind whatever upon the part of the contractor to perform fully and faithfully all the terms and conditions therein named and contained.

f. The party or parties to whom the contract shall be awarded will be required to attend at the office of the Borough Clerk within five (5) days from the date of award to sign the agreement, and in case of failure or neglect so to do, he or they will be considered as having abandoned it, and as in default to the said Borough; and thereupon the Council may re-advertise the said work to be re-let as before, and so on, until the contract is accepted and the agreement is executed.

g. In no case will contractors be allowed to use materials other than of the quality and dimensions prescribed in the plans and specifications, or which may be specified by the Borough Engineer.

h. Bidders will examine for themselves the location of the proposed work, so that no misunderstanding may exist in regard to the nature of the work to be done.

12

ived today the letter quoted from the central missouri telephone company jefferson city mo is not in a position to bid on the work we take pleasure in referring the matter to you please submit a price on laying approximately 500 yards of block stone pavement on the road leading to our avenue pole yard a 3" gravel the stone will be sufficient price should include the widening of the present roadway bottom of the grade the construction of a small sluice and the grading also the placing of

old telephone poles in position to substitute for curbing the contractor is to furnish all labor tools and materials except the telephone poles these will be furnished at the yard by the telephone company all work and material are subject to the approval of our construction engineer we shall thank you to submit a price on the above work on or before september 15 we suggest that you get in touch with mr c h duncan construction engineer of the telephone company you may use our name in communicating with him yours very truly

### OFFICE TRAINING ASSIGNMENTS

this section you are working in the office of the general superintendent Turner Construction Co., St. Louis, Mo.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

The style letter illustrates a very useful form of arrangement for a letter containing detailed items. Observe that the entire letter is written in "block" form. In letters and papers containing price quotations, sums of money are written out followed by the figures in parentheses.

**Assignment 1.** Copy the style letter with carbon on form 36.

**Assignment 2.** Copy letter 4 with carbon on a letterhead. Indent the lines as shown in the style letter. Present the letters for signature.

#### SPECIFICATIONS

When building or construction work is to be undertaken, the architect or engineer draws up specifications setting forth the conditions under which the work will be awarded, the exact work to be done, and the materials to be used.



Such specifications are usually dictated to a stenographer. They must be written with great care as they form the basis on which contractors submit bids. Two sets of specifications are shown in the budget of forms. The first set is for the construction of a concrete tunnel lining, and the second covers the building of a house.

**Assignment 3.** Copy the specifications given on form 37 with one carbon.

**Assignment 4.** Copy the specifications shown on form 38 with one carbon.

### BUILDING AGREEMENTS

When a bid submitted by a contractor on a given piece of construction work has been accepted, the parties draw up a building agreement like the following contract setting forth their mutual obligations.

### BUILDING AGREEMENT

THIS AGREEMENT, made by and between the Turner Construction Company, Contractors, of St. Louis, Missouri, hereinafter referred to as the Contractor, and the Morris Development Company, of St. Louis, Missouri, hereinafter referred to as the Owner, covering certain roadway, sewerage, and other work on the premises owned and controlled by the said Morris Development Company, bounded by Kenwood Avenue, Wilkens Street, Whittier Avenue, and the proposed road to be known as Woodland Road, more minutely described hereinafter,

WITNESSETH, That in consideration of certain payments to be made by the Owner to the Contractor, the Contractor agrees to construct all drives, sewers, manholes, catch basins, and lamp holes, as described and marked on drawings and in accordance with specifications, signed copies of such drawings and specifications being attached hereto and forming a part of this contract; it being understood and agreed that the Contractor shall perform all of this work in a thoroughly workmanlike and proper manner, subject to the criticism and acceptance of the Engineer of the Owner.

The following scale of prices shall govern in the payment for this work:

|                                   |                    |
|-----------------------------------|--------------------|
| Asphaltum Paving. . . . .         | \$2.50 per sq. yd. |
| Sandstone Curb, in place. . . . . | .80 per lineal ft. |
| Telford Foundation. . . . .       | .80 per sq. yd.    |
| Telford Surfacing. . . . .        | .80 per sq. yd.    |
| Excavation for Telford. . . . .   | .45 per cu. yd.    |

|  |                    |
|--|--------------------|
| Excavation for Asphalt.....                  | .45 per cu. yd.    |
| Catch Basins, complete.....                  | 40.00 each         |
| Manholes, complete.....                      | 45.00 each         |
| Lamp Holes, complete.....                    | 7.50 each          |
| 9" Barret Trap, or equivalent, in place..... | 3.00 each          |
| 9" T. C. Sewer, in place.....                | .60 per lineal ft. |
| 6" T. C. Sewer, in place.....                | .50 per lineal ft. |
| 4" Porous Tile Sewer, in place.....          | .10 per lineal ft. |
| 6" Porous Tile Sewer, in place.....          | .20 per lineal ft. |

Payments shall be made monthly upon estimates prepared by said Engineer for work completed to date; final payment to be made only after the entire work has been completed and accepted by said Engineer.

The Contractor agrees to furnish all labor, materials, tools, etc., necessary for the proper completion of this work, with the exception of such material as is found on the premises and approved by the Engineer for use in connection with this work.

The Contractor guarantees all work to be first-class and to repair and remedy any defects that may develop within one (1) year from the completion of the entire work, and will furnish a satisfactory bond running to the Owner in the sum of One Thousand (\$1000.00) Dollars for a period of one (1) year to insure the proper performance of this guarantee.

The Contractor further agrees to perform all work in accordance with the City, Park, or other ordinances in effect at the time the work is performed; also to secure all necessary permits from City, Park, or other officials that may be required; and further, to make any and all connections with City or Park sewers, water mains, and gas mains in accordance with the ordinances governing these matters; and further, to protect the Owner from any claims of the City or Park authorities, or other officials, on account of any interference with City, Park or other property, or for failure to perform the work as hereinbefore stated.

The Contractor hereby covenants, promises, and agrees to protect and save harmless the Owner from any Mechanics' Liens or other liens of any nature whatsoever brought against the said Owner's property, or curtilage appurtenant thereto, by the Contractor, or subcontractors, laborers, or material-men, for work done or material furnished for or about said work, or on the credit thereof; and further agrees that all subcontractors, material-men, and laborers on said work shall look to and hold the Contractor personally liable for all subcontracts for work or labor done or

material furnished, so that there shall not be any legal or lawful claims of any kind whatsoever against the Owner. The Contractor also agrees to deliver to the Owner a proper form of release of any and all liens before final payment is made.

The Contractor agrees to protect the Owner from any and all claims of any nature whatsoever which may arise from the use of patented articles or material used in this work.

It is further agreed that the Contractor shall indemnify and save harmless the Owner from all claims, demands, payments, suits, actions, recoveries, and judgments of every kind and description brought or recovered against the Owner, for or on account of any injuries or damages received or sustained by any party or parties by reason of any act of the Contractor or his agents or servants in the construction of said work; or by or in consequence of any negligence or carelessness in guarding the same; and also that so much of the moneys due or to become due to the Contractor under this agreement as shall be deemed necessary by the Owner shall or may be retained by the Owner until every and all such claims, demands, suits, actions, recoveries, and judgments shall have been settled and discharged to the satisfaction of the Owner.

It is distinctly understood that the Owner shall in no way be responsible for Contractor's material or tools while on said premises.

The Contractor agrees to begin active operations within three (3) days after written notice from the Engineer, it being estimated that this notice will be given in approximately one week to ten days from the date of this agreement.

The Contractor agrees to supply all necessary material and to furnish sufficient labor to complete the work within sixty (60) days from the date of this agreement.

The said parties for themselves, and their heirs, successors, executors, administrators, and assigns do hereby agree to the full performance of the covenants herein contained.

IN WITNESS WHEREOF the parties to these presents have hereunto set their hands and seals this fourteenth day of April in the year one thousand nine hundred and nineteen.

ATTEST \_\_\_\_\_ By \_\_\_\_\_ SEAL

ATTEST \_\_\_\_\_ By \_\_\_\_\_ SEAL

**Assignment 5.** Copy the building agreement with one carbon. Insert the current date in the last paragraph. Draw lines on the typewriter for the signatures as shown.

#### PUNCTUATION AND PARAGRAPHING

Read letter 12 and determine upon its punctuation and paragraphing.

**Assignment 6.** Write the letter to the following local contractors:  
McLean Contracting Co., 1241 Liberty Avenue  
Consolidated Engineering & Contracting Co.  
The Edward B. McDermott Contracting Co.

#### TRANSCRIBING

**Assignment 7.** The general superintendent will dictate to you five letters for transcription. Hand in your letters for signature.

#### FILING

Your correspondence in this section is to be filed in the numerical file. The numbers of the companies referred to in the letters you have written are as follows:

- 37—Missouri Water & Electric Company
- 127—Pittsburgh Terminal Railway Company
- 46—Central Missouri Telephone Company
- 54—Western Union Telegraph Company
- 74—Postal Telegraph & Cable Company

122—City of St. Louis, Mo. Correspondence relating to the St. Louis Electrical Commission is filed in the "E" file back of the "City of St. Louis" file. File under "S" for St. Louis.

**Assignment 8.** Make out cards and file them in the alphabetical card dex. Prepare folders and file the correspondence.

#### SECRETARIAL PRACTICE

**Assignment 9.** The general superintendent: "Write the State Highway Department at Indianapolis thanking them for the information given in this letter (No. 7). Ask them to send us two copies of their standard specifications covering road building."

**Assignment 10.** We have received no reply to our letter to the St. Louis Terminal Railway Company (No. 4). Write them inquiring if the contract has been let. If not, say that our engineering department would like to discuss certain features of the specifications with Mr. Williams. State that the work should be begun very soon so that winter weather may not interfere with its completion.

**Assignment 11.** The general superintendent: "I see that the Missouri Water & Electric (see letter, page 244) comes back at us this morning with some extensive changes in their plans. Elliot (our chief engineer) says it will take him ten or four or five days to get the information on which to make a new bid because they will have to inspect the reservoir again. Write them. Keep in touch with Elliot and let me know when the new bid is ready."

# Twin City Motor Car Company

DISTRIBUTORS

*Cole Aero-Eight Franklin Air-Cooled Six*

SALESROOM AND SERVICE STATION

1220 NICOLLET AVENUE

Minneapolis

Dr. L. C. Thayer,  
642 Professional Bldg.,  
St. Paul, Minn.

October 10, 1920.

Dear Sir:

In accordance with our policy of helping Franklin owners to keep their cars in satisfactory operating condition, we call your attention to some necessary instructions relative to the starting of your motor during the coming winter months. In cold weather easy starting depends largely on the correct operation of the choke valve.

To start motor

- 1--Close carburetor hand control.
- 2--Advance spark control lever half-way on sector.
- 3--Throw on starting motor switch.
- 4--Start turning the choke valve handle toward "RICH" until motor starts.

Care should be taken not to close the choke valve too quickly. The motor will start before it is entirely closed except in extremely cold weather. When the motor starts, the clutch pedal should be released and the accelerator worked up and down. At the same time the choke valve should be quickly turned back toward "LEAN," keeping it adjusted as lean as possible without causing the motor to "spit." The motor should then be permitted to warm up slightly before starting the car. When the motor is warm, the choke valve should be at "LEAN" or as close as possible without causing the motor to miss.

For proper carburetion during cold weather the carburetor hot-air pipe should be two-thirds closed and fully closed at extreme temperatures. The carburetor should be adjusted with the shutter in the normal running position.

In cold weather do not use an excess of gasoline. If the mixture is too rich part of the gasoline will be forced past the piston rings and cause the oil to lose its lubricating properties. Do not speed up the motor before it is thoroughly warm--cold oil will not lubricate.

If you have any difficulty in starting your motor during cold weather, please call at our salesroom and we shall be pleased to demonstrate the operation to you.

Yours very truly,

Twin City Motor Car Company,  
*A. M. Bergwin*  
Service Department.

AFB-e

## AUTOMOBILE SECTION

### TECHNICAL TERMS

- Accelerator**—a throttle operated by the foot.
- Anti-skid**—applied to a tire having a notched or grooved tread to prevent slipping.
- Assembling**—the act of fitting together different parts of an automobile.
- Interphone**—a tube in an enclosed rear compartment through which the passenger can speak to the driver.
- Clash**—the lost motion in the working parts of machinery.
- Light (broo'am)**—a closed car with no roof over the driver's seat.
- Injector**—the apparatus by which liquid fuel is converted into gas.
- Transmission**—the complete running gear and mechanism of an automobile exclusive of the body.
- chauffeur (sho'fer)**—the driver of an automobile.
- Clutch**—a movable coupling used for transmitting motion or for disconnecting moving parts of machinery.
- Combustion**—the act of burning; explosion of gas in a cylinder. The *combustion chamber* is the upper part of a cylinder where the explosion takes place.
- Compression**—the pressure exerted upon the gas in a cylinder by the piston just before the ignition of the gas.
- Condensation**—the reduction of a gas or vapor to a liquid form.
- Coach (koo-pa')**—an inside-operated enclosed car.
- Dashboard**—the casing of an automobile covering the dashboard and extending from the hood to the driver's seat.
- Deflation**—the act of removing the air from a pneumatic tire; the opposite of *inflation*.
- Detachable**—capable of being taken off (applied to wheel rims).
- Differential**—the part of a rear axle containing the driving gears and the equalizing gears necessary in turning curves.
- Flush**—exactly in line or even with.
- Garage (ga-razh')**—a place where automobiles are stored.
- Engine**—any metal case enclosing working parts of machinery.
- Ignition**—the act of firing gas in a cylinder; the electrical apparatus on a motor car which supplies the electric sparks for causing the explosions in the cylinders.
- Limousine**—a closed car with folding top, seats for three or more persons inside, and a driver's seat outside.
- Business**—a closed car with separate compartments for passengers and driver.
- Generator**—a device for generating electricity.
- Manifold**—a pipe or tube used for conveying gas, air, or water and having several inlets or outlets.

- poppet**—a valve which rises from its seat as distinguished from a slide valve which slides back and forth over its seat.
- resilient**—springing back; rebounding (applied to the springs and tires of an automobile).
- sector**—a piece of metal shaped like an arc and mounted on the steering wheel to which the spark and throttle hand levers are fastened.
- sedan**—a closed car seating four or more persons all in one compartment.
- short-circuited**—put out of commission by the passage of an excessive current of electricity.
- speedometer (spe-dom'e-ter)**—an instrument for recording speed and mileage.
- sprocket**—a gear wheel which engages a chain.
- terminal**—the end of an electric wire or the point where a circuit begins and ends.
- thermostat**—an automatic apparatus for indicating and regulating temperature.
- tonneau**—a term applied to the rear compartment of a touring car.
- transmission**—the gearing by which the power is transmitted from the engine to the rear wheels and by which the various degrees of car speed to engine speed are secured in a motor car.
- trunnion**—a part of the hoisting mechanism of a truck body.
- vaporize**—to convert into vapor by the application of heat.
- victoria**—a type of low body having a single seat for two passengers with an elevated seat behind. It has an adjustable folding leather top.

## CORRESPONDENCE

1

Mr. A. C. Preston,  
Lock Box 219,  
Hammonton, N. J.

Dear Sir:

We have your letter of the 2d instant informing us that your motor misses and that you are | unable to locate the trouble. Missing usually results from an improperly adjusted carburetor; short-circuited<sup>1</sup> spark plugs; plugs with broken | porcelains; carbonized points, or improperly adjusted points; carbonized valves; defective ignition circuits; or water in the carburetor.

We suggest that | you proceed as follows:

1. Drain the carburetor for water and dirt, but do not tamper with the adjustments unless | you are experienced in carburetor adjustment.
2. Inspect the plugs for short circuits, cracked porcelains, and correct adjustment of the | <sup>100</sup> points.
3. Inspect the wiring system for partially short-circuited or broken secondary terminals.
4. Remove the dust plate enclosing | the valves to see if any of the valves are stuck, or if any of the valve springs are weak | or broken.

<sup>1</sup> Hyphenated because a compound adjective; but see *short circuits* below.

If the missing is not due to the above causes there may be leak between the carburetor intake manifold, or between manifold and the cylinder block. you cannot locate | the diff-  
 fter exhausting these sugges-  
 our only recourse is to bring  
 in to us for further exami-  
 | <sup>200</sup>

Yours very truly, (203)

2

ity Motor Car Co.,  
 nneapolis, Minn.  
 nen:

response to your request we  
 ailed you samples of Type 55  
 l car trimming materials,  
 | in book form. This method  
 ing the samples will be found  
 r to mounted cards, as the  
 ; are | of liberal size, thus  
 ing the material to better  
 age than is possible with  
 pieces of upholstery.

imming material | for the  
 55 enclosed cars is optional.  
 ection, however, at the regular  
 is restricted to the | samples  
 ed in the sample book. If  
 ier material is specified, it can  
 ished only at an additional  
 arge. As there is no standard  
 rg, the dealer must specify  
 rming desired on each enclosed  
 ler, indicating | the selection  
 number appearing on the tag  
 d to the back of each sample.

These trimmings are available |  
 for open-front limousine, imperial  
 limousine, landaulet limousine, sedan,  
 and brougham body types only.  
 Coupes and victorias are to be |  
 trimmed in different materials,  
 samples of which will be mailed  
 later.

All materials contained in the  
 sample book are supplied | by the  
 Fansom Company of New York City,  
 with the exception of trimming No.  
 618, which is the product | <sup>200</sup> of  
 L. C. Chase & Company, Boston.

Yours very truly, (210)

3

The Zell Motor Car Company,  
 11-15 E. Mt. Royal Avenue,  
 Baltimore, Md.

Gentlemen:

Subject—Truck Orders

In response to yours of the 13th  
 we can ship trucks equipped with  
 any make of | tires, continuous or  
 block, demountable or pressed-on.

In specifying chassis<sup>9</sup> to be  
 equipped with wood hydraulic hoists,  
 please note | that body hinges are  
 not included with the hoists and will  
 not be furnished unless they are  
 specifically ordered. In | every case  
 where a chassis is ordered to be  
 equipped with the hoist, the frame  
 will be cut off close | to the rear  
 spring hangers unless otherwise or-  
 dered. In this connection we call  
 attention to page 3 of the "Truck  
 | <sup>100</sup> Data Book" regarding body

he plural of *chassis*. Compare *crises*, *buses*, and *axes*.



lengths recommended with wood hydraulic hoists, which should be referred to when specifying the chassis length. |

The price of screw power hoists, which we are again in a position to furnish, includes both the body hinges | and the trunnion for attaching the front end of the body to the hoist. When screw hoists are ordered, the | chassis frame will be cut off close to the rear spring hangers.

We will appreciate it very much if you | will bear these points in mind when placing your orders, as it not only makes the order much easier to | <sup>200</sup> handle here but will in many cases facilitate the placing of your order in the factory.

Yours truly, (218)

4

To All Standard Eight Distributors:<sup>3</sup>  
Attention Service Department

All cars coming through from now on will be equipped with a circuit breaker mounted on the | combination switch, as shown in the enclosed illustration. This device takes the place of a fuse block and fuses. It | prevents the discharging of the battery or damage to the switch or wiring to the lamps, horn, and ignition, in | case any of the wires leading to these parts become grounded. As long as the lamps, horn, and ignition are | using the usual amount of current, the circuit breaker is not affected. If any of the

wires become grounded, an | <sup>100</sup> abnormally heavy current is conducted through the circuit breaker, thus producing a strong magnetism, which attracts the pole piece and | opens the contacts. This cuts off the flow of current, which allows the contacts to close again and the operation | is repeated, causing the circuit breaker to pass an intermittent current and to give forth a vibrating sound.

It requires | 25 amperes to start the circuit breaker vibrating, but once started a current of from three to five amperes | will continue the vibration. In case the circuit breaker vibrates repeatedly, do not attempt to increase the tension of the | <sup>200</sup> springs, as the vibration is an indication of a ground in the system. Remove the ground and the vibration will | stop. If the circuit breaker continues to vibrate when all the buttons on the combination switch are depressed, the ground | is almost invariably in the horn or its circuit.  
(249)

5

Hawkins-Cole Agency,  
Evansville, Ind.  
Gentlemen:

We are shipping to you by express five dozen of the new style thermostats covered by piece | # 71146. These thermostats are adjusted to a heat regulation of 135 to 150 | degrees, as explained in Technical Letter # 1476 sent you last week, and may be distinguished by | the pres-

<sup>3</sup> This is an example of a technical letter issued by automobile manufacturers to their distributor.

of an additional petcock in  
of the forward valve.

Please see that these are im-  
mediately attached to cars in your  
series and the old thermostats  
sent to us by express. It is im-  
portant that cars in service be  
equipped with the old thermostats  
be equipped with the new units at the earliest pos-  
sible. However, our available  
supply is limited, and it is only by  
your active co-operation in  
reporting the changes and returning  
old assemblies that we can  
make rapid progress in effecting the  
change. You will be furnished with  
sufficient supply to fill your re-  
quests just as soon as the factory  
completes the alteration of the old  
thermostats.

Request your mechanics to be  
sure that the valves controlling the  
flow to the radiator and the by-  
pass are working properly with  
all parts perfectly clean before  
operation.

We are also mailing a supply of  
campaign cards which are to  
be used in reporting the changes.  
Very important that these cards  
be returned to us promptly so that  
we may be informed as to what  
will require new thermostats.

Yours very truly, (254)

6

Caterpillar Motor Car Company,  
Boston, Mass.  
men:

All series 850 cars shipped from  
factory from now on will be  
equipped with a Cole-Stromberg

carburetor especially designed for the  
Cole Eight motor. This carburetor is  
provided with a hot-air attachment,  
which assists greatly in the va-  
porization of fuel and tends to pro-  
duce a smooth running motor. A  
shutter or butterfly valve, controlled  
by a cowl adjustment, working in  
the primary air intake, facilitates  
starting in cold weather. When the  
speed is under twenty-five miles  
an hour, the low speed jet furnishes  
the proper mixture for all variations  
of speed, but above that speed  
the auxiliary air valve comes into ac-  
tion with a secondary nozzle, which is  
interconnected with the valve.

At speeds under twenty-five  
miles the fuel passes through a  
strainer underneath the float into the  
float chamber and is fed through  
the primary nozzle. When that  
speed is exceeded the high speed jet  
also comes into action, the fuel  
working its way around a dash-pot  
piston which is .005 of an inch smaller  
than its chamber, thence through  
four small holes in the sleeve to the  
needle valve.

When the air valve opens, it  
forces the piston downward against  
the gasoline pressure, at the  
same time unseating the auxiliary  
needle. Further movement of the  
auxiliary valve causes the needle  
valve seat to move away from the  
valve needle, thus increasing the  
opening. The reason the dash-pot is  
used is to make the action of the  
air valve smooth and gradual, doing  
away with fluttering. When the

throttle | is opened quickly, the air valve opens gradually, preventing coughing and missing.

Instructions for the care and adjustment of this | carburetor are now in preparation and will be forwarded to service stations within the next ten days.

Yours very truly, | (300)

7

Stone Automobile Service Co.,

Lebanon, Pa.

Gentlemen:

We are forwarding to you an advance supply of specifications on next season's models. In recommending the study of | these specifications to distributors and their salesmen we wish to offer a word of advice as to selling policy.

We | believe many salesmen lose orders by being too technical. Every motor car salesman should, of course, be fully informed as | to the design and mechanical construction of his car. If a prospect inquires as to what an inherently balanced crank | shaft is, the salesman should be able to answer that such a shaft is one which has been balanced without |<sup>100</sup> resorting to artificial means of distributing its weight, such as attaching weights at various angles; in other words, that its | balance results from its shape, construction, and the distribution of the metal in it. However, if the dealer is wise | he will discuss a technical feature of this kind only in the few cases when it is necessary.

Nowadays motor | cars are generally sold on the basis of appearance, design, comfort, performance, and price. The average buyer will purchase a | car if he is satisfied with its appearance, approves of its design, finds it comfortable to travel in, is pleased |<sup>200</sup> with its performance, and considers the price a reasonable one. He will buy regardless of the make of the carburetor, | whether the connecting rods are 9½ or 10" long, whether the motor is of the overhead valve | type or L-head design, or whether a semi-floating or full-floating type of rear axle with spur | tooth or spiral bevel gears is used.

We urge distributors to adopt the policy of emphasizing the features of our | cars which appeal to the layman's understanding, and to avoid the technicalities upon which he is not qualified to pass |<sup>300</sup> an intelligent judgment.

Yours very truly, (306)

8

Technical Department Bulletin  
No. 127

It is sometimes necessary, particularly in cold weather, to press the starting button on the Model 27 car a | number of times before the pinion on the starting motor can be made to engage with the gear on the | flywheel. This is caused by the accumulation of heavy oil or grease on the pinion of the starting motor, | with the result that the thread on the armature shaft over which the

pinion automatically engages retards the action of the pinion. This oil gets into the big gear of the fly-wheel by working out along the bearing of the transmission and then into the fly-wheel housing, where the fly-wheel picks it up and transfers it to the starting motor pinion shaft.

In the event that this trouble is experienced, it can be effectively remedied in the following manner:

- First:** Take off hand plate over clutch. Remove plug under fly-wheel and drain off heavy oil in fly-wheel housing.
- Second:** Place solid plugs in drain holes under fly-wheel and clutch.
- Third:** Pour two quarts of kerosene through hand hole over clutch, but be careful to use funnel so that kerosene will flow directly to bottom of case and not splash over brake and clutch shaft, or over the clutch itself or clutch pilot bearing, and thus wash off lubrication on these parts and thereby cause squeaks.
- Fourth:** Press starting button three times, permitting motor to run each time on starting motor only for about one-half minute. This will wash grease off fly-wheel gear and starting motor pinion shaft.

- Fifth:** Remove plug under fly-wheel, drain out kerosene, and replace with plug having one-quarter inch drain hole, or leave out plug entirely. It is also unnecessary to have plug under clutch, although this hole may be closed with solid plug if desired. (309)

9

#### Technical Service Letter No. 328 Adjustment of Differential Gears

Before attempting to adjust the differential gears on series 850 cars, see that the back of the teeth on the pinion and rear gears are flush. The helical pinion, which is forged and cut in one piece with the pinion shaft, is mounted with a bearing on either side of the gear, thus holding it rigidly in place. The carrier has been changed so that instead of adjusting from both sides it is only necessary to adjust the bearings from one side. The pinion shaft bearing is adjusted from the forward end with a single adjustment as formerly.

Take up the play between the bearings until there is no end motion, but do not bind or cause the shaft to turn hard. Line up the slots in both adjusting nuts, then turn both toward the right and bring the pinion deeper into mesh with the ring gear, or toward the left to withdraw. The proper amount of backlash between the teeth of the ring gear

and pinion is from .006 to .008 | of an inch.

If the pinion is flush with the ring gear and there is too much or too little | <sup>200</sup> lash, the ring gear may be adjusted either in or out. Remove the differential cover-plate on the rear of | the axle housing. Take off the differential bearing adjustment lock and back off slightly the bolts holding the bearing caps | in place so that the adjusting nut can be turned easily. To move the gear toward the right, back off | the right-hand adjusting nut one or two notches at a time and take up on the left-hand nut, | or if the gear should be adjusted to the left, reverse this action.

The pinion shaft and gears are now | <sup>300</sup> made of nickel chrome heat-treated steel; likewise the drop-forged tapered driving shafts. (314)

### 10

#### Technical Letter No. 247

To Chalmers Distributors:

Subject: Reground Cylinders

When it is desired to install re-ground cylinders, the oversize block will be secured on dealer's order | at the list price in the same manner as any other part. The replaced casting should then be returned to | the factory, and if it is found to be in such condition that regrinding is possible, credit will be allowed | on the basis of column 7 in the enclosed table.

All oversize parts are carried under individual piece numbers as | shown on the table. The factory,

however, reserves the right to fill orders for cylinder and piston sets with either | <sup>100</sup> of the two oversize types, or with standard sizes, in case the particular size called for is not available.

When | cylinders are returned for regrinding, the pistons should not be included and the valve stem guides and water chamber cover | studs should be removed. We specify the removal of the valve stem guides and equipping the reground cylinders with new | parts because this is necessary to correctly center and recut the valve seats.

The credit allowed upon the return of | a cylinder block will be that of a cylinder and core plug assembly, less the valve stem guides and less | <sup>300</sup> the cost of regrinding. In order to secure this credit it will be necessary for the shipper to quote upon | the claim tag the factory mail order number under which the replacing parts were shipped. Dealers will not be allowed | to return a greater number of cylinders than have been ordered for replacement purposes.

If cylinders are returned which are | so deeply scored that they cannot be successfully reground without first filling the score, an additional charge will be made | for this work. Care should be taken not to return cylinders which have already been reground to the oversize limit. | <sup>200</sup> All reground cylinders have their oversize dimensions plainly stamped on the bottom face of the cylinder casting.

Yours very truly, | (320)

## 11

P. J. Hauser,  
Monticello, Minn.

Sir:

We judge from your letter of the that the loss of compression in motor is probably due to im-  
ctly seated valves, resulting  
insufficient clearance between  
valve stems and lift rods, car-  
leposits on the valve seats, or  
valve stems and guides.

When the valves are closed the  
roller holders, or lift rods, on  
the inlet and exhaust valves  
d be adjusted to a clearance of  
of an inch between the lift rod  
the valve stem. Be sure the  
is cold when adjusting this  
nce.

nspect the valve seats for  
n deposits and pitting. The  
s themselves are of alloy steel  
will not warp or pit. This  
s the grinding of the valves un-  
ary, except in unusual cases.  
valves seat, however, may collect  
on deposit or become pitted,  
will prevent the valve from  
ig compression. When this  
s the valves should be removed  
the seats ground with a mixture  
and powdered glass or some  
red valve grinding paste.

o grind the valve seat, un-  
the valve chamber plug and  
e the collar key, valve collar,  
oring. Take out the valve,  
it thoroughly, and make sure  
he valve stem and guide are in  
condition. Stuff rags or waste

into the port between the valve cham-  
ber and the cylinder to keep grinding  
material out of the latter; then re-  
place the valve upon its seat, mak-  
ing sure that there is ample clearance  
between the valve stem and the roller  
holder set screw. It is a good plan  
to put a light spring around the valve  
stem before placing the valve for  
grinding. This causes the valve to  
rise when grinding pressure is re-  
leased and prevents a groove from  
being ground in the seat. Grind  
by rotating the valve back and forth  
with a screw driver or hand brace.

If you cannot remedy your  
trouble by the measures suggested,  
you should bring your car to our serv-  
ice station for inspection.

Yours very truly, (342)

## 12

people have realized ever since the  
beginning of things that the heavier  
an object is the greater must be the  
strength required to lift carry slide or  
roll it it is also generally known that  
strength or power is obtained by the  
consumption of fuel in the human  
being fuel is the food that goes to  
make up the blood and tissue of the  
body in the machine it may be coal  
gas kerosene or gasoline the first  
thing a man thinks of in order to  
save strength is to lighten the load  
the first thing to do in things me-  
chanical to economize in power and  
hence in fuel is to lighten the load  
for saving gasoline light weight is the  
predominating principle involved in  
designing automobiles its effect is so

broad that it influences practically every element entering into economy the franklin car is economical in the use of gasoline because of its light weight the little booklet we are sending to you why the average

motorists dollar is shrinking tells an interesting story of how the principle of light weight is applied in the design and construction of franklin cars we would like to have you read it yours very truly

### OFFICE TRAINING ASSIGNMENTS

In this section you are employed by the Twin City Motor Car Company, of Minneapolis, as stenographer to the manager.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

The block form of arrangement is widely used because it saves the time required to indent addresses and paragraphs. All the lines should be approximately the same length so that the right-hand margin will not present a broken appearance. Study the style letter. Use the block form in this section.

**Assignment 1.** Copy the style letter with carbon on form 39.

**Assignment 2.** Copy letter 11 with carbon on a letterhead. Submit both letters for signature.

#### AFFIDAVIT

We have sold two automobiles to the Department of Public Works, St. Cloud, Minn. The city ordinances require an affidavit to accompany the invoice. We use the following form.

#### Affidavit

Sworn statement by and on behalf of the Twin City Motor Car Company of Minneapolis, Minnesota, distributors for the Cole Motor Car Company of Indianapolis, Indiana.

State of Minnesota )  
 ) SS.  
 )  
 City of Minneapolis )

Charles P. Snedden, Secretary of the Twin City Motor Car Company, of full age, being duly sworn, on his oath deposes and says that the automobiles itemized in the annexed invoice have been delivered to the pur-

haser named therein; that no bonus, commission, or gratuity of any kind r description has been given or received by any person or persons not regularly in the employ of the Twin City Motor Car Company in connection with the sale of the automobiles covered by the said invoice; and that the same is correct and true and that the amount therein stated is justly due and owing as set forth.

Sworn and subscribed before me this.....day of.....19....  
.....  
Notary Public.  
My commission expires.....

**Assignment 3.** Make a copy of the affidavit with carbon. Insert the correct date. Do not fill in the other blanks; they will be filled in by the secretary and the notary when the paper is sworn to and executed.

ROUGH DRAFT—AGENCY CONTRACT

The manager dictated and corrected the agency contract shown on form 40.

**Assignment 4.** Copy the contract with carbon, being careful to make all the changes and additions indicated.

AUTOMOBILE SPECIFICATIONS

The following are the Chassis and Body Specifications of the Cole Aero-eight:

Cole Aero-Eight  
Mechanical Data  
Chassis Specifications

Motor—Eight cylinder. High speed. 3½" bore. 4½" stroke. 346.4 cubic inch piston displacement. "L" heads removable, affording quick easy access to valves and combustion chambers. Cylinder blocks and crankcase cast in two sections divided vertically. Cam and pump shafts driven by helical gears. Counterbalanced crank shaft. Hot-spot manifold for increasing efficiency of fuel. Aluminum alloy pistons. S. A. E. horsepower 39.22. Actual horsepower more than 80.

Lighting—Delco single unit.  
Ignition—Delco single unit.  
Distributor—Delco single unit.



- Carburetor—Special Cole-Stromberg.
- Fuel System—Vacuum feed, with triple capacity Stewart-Warner vacuum tank on dash under hood. Designed especially to accommodate excessive speeds and long hills.
- Lubrication—Force feed, gear pump readily accessible from outside of motor; driven from crankshaft.
- Radiator—Special Cole design, with bevel front and detachable cellular core, 17% greater cooling efficiency.
- Cooling—Centrifugal pump and propeller type fan.
- Clutch—Improved cone type, leather faced, with auxiliary springs on leather for easy engagement.
- Transmission—Selective sliding type. Three speeds forward and reverse.
- Control—Left-hand drive, center control.
- Steering—18" black walnut corrugated steering wheel. Irreversible type gear with ball thrust bearings.
- Frame—6" channel section, heat-treated pressed steel. Tapered at front to give shortest possible turning radius, widened at rear to afford rigid body support.
- Cole trunion design with special cross-member in rear.
- Wheelbase—127", right for power and road comfort.
- Tread—Standard, 56".
- Axles—Rear: Cole improved full-floating flange drive. Silent helical-bevel gears. Alloy steel axle shafts. Bevel gear differential. Pressed steel housing.
- Front: Special drop-forged and heat-treated I-beam. Tapered roller bearings front and rear.
- Brakes—External contracting foot brake, 15 x 2". Internal expanding emergency brake, 14-5/8 x 2".
- Springs—Cole direct drive spring suspension. Springs oil tempered, 39" semi-elliptic front, 57" semi-elliptic rear. Underslung in rear. Shackle bolts equipped with large oil cups and bronze bushings.
- Wheels—Extra heavy, twelve-spoke artillery type with metal felloeband. Wire wheels extra.
- Tires and Rims—Cord tires on all four wheels. 33 x 5" front and rear. Straight side. Quick detachable demountable rims.
- Equipment—Motor driven tire pump with air hose and gauge permanently attached. 75-mile speedometer. Oil pressure gauge. Combination dash and service light with 15-foot automatically rewinding

cord. Electric motor driven horn. Duplex headlights. Twenty-gallon gasoline tank with gauge. Hartford shock absorbers. Complete outfit of tools. Cole special design wheel and tire carrier. Motometer.

Body Specifications  
Tourster—Model 870

Design—Aerotype with low beveled panels and high cowl.

Color—Cole Deep Blue with blue wheels, black fenders, running board shields, and radiator.

Seating—Seven-passenger. Solid front seat. Vanishing auxiliary seats with extra foot and knee space in back of front seat. Full 48" rear seat.

Upholstery—Black long grain leather. Semi-bright. French fold over genuine curled hair and Ride-Easy springs.

Windshield—Full-ventilating, rain-vision type. Sloping design.

Top and Curtains—One-man type. Black Pantasote—gray lined. Johnston plate glass windows in rear curtain. Cole design door-opening side curtains, which fold conveniently out of the way under top when not in use. Semi-Victoria type rear quarter curtains with Johnston plate glass windows furnished at small extra charge.

Special Features—Large pockets in each door. Special impedimenta compartment in back of front seat and under cowl. Tool space under front and rear seat. Metal robe rail at back of front seat. Foot rest in tonneau. Automatic step light. Waltham 8-day clock. Heavy velvet carpet in tonneau. Extra heavy linoleum covered, metal bound toe and floor boards. Natural finish walnut instrument board.

Roadster—Model 871

Design—Aerotype with low panels and high cowl.

Color—Dust-proof. Gray with gray wheels and fenders, running board shields, and radiator.

Seating—Two-passenger.

Upholstery—Black long grain leather. Semi-bright. French fold over genuine curled hair and Ride-Easy springs.

Wind-shield—Full-ventilating, rain-vision type. Sloping design.

Top and Curtains—One-man type. Black Pantasote—gray lined. Johnston plate glass windows in rear curtains. Cole design door-opening

side curtains, which fold conveniently out of the way under top when not in use. Semi-Victoria type side curtains with Johnston plate glass windows furnished at small extra charge.

Special Features—Large pockets in each door. Special impedimenta compartment at back of front seat and under cowl. Tool space under front seat. Spacious dust and waterproof suitcase compartment under rear deck. Golf compartment with opening at right side of car. Waltham 8-day clock. Extra heavy linoleum covered, metal bound toe and floor boards. Natural finish walnut instrument board.

**Assignment 5.** Copy the specifications with carbon.

### BILLING

One of our regular bills is shown below.

**TWIN CITY MOTOR CAR COMPANY**

COLE AERO-EIGHT                      1220 NICOLLET AVENUE                      FRANKLIN  
MINNEAPOLIS, MINN.

SOLD TO Northwestern Consolidated Milling Co.                      Date July 26, 1920  
Minneapolis, Minn.

TERMS: Net Cash Thirty Days                      JOB NO. 4758

|  |      |       |       |
|--|------|-------|-------|
| To repairs on Packard truck, Minn. 4072:<br>Scraping connecting rod and crank shaft bearings,<br>removing piston slap, grinding valves, overhauling<br>magneto, repairing radiator, adjusting clutch, and<br>adjusting differential gears, etc., per your order<br>7/12/20 |      |       |       |
| 46 hours labor, first class mechanic   | 1.00 | 46.00 |       |
| 32 " " , helper  | .60  | 19.20 |       |
| 1 left front steering knuckle  |      | 12.75 |       |
| 1 intake valve   |      | 1.60  |       |
| Cotter pins, gaskets, washers, nuts, bolts, etc.,<br>used on job   |      | 1.33  | 60.87 |

ILLUSTRATION 32—BILL OR INVOICE

**Assignment 6.** Make out bills in duplicate on the billheads marked "form 41" from the following information. Use the current date except that in bill 4, which is for the monthly purchases of one of our customers who stores his car with us, use the current month and the dates which are supplied in the exercise. This is a combination of a bill and a monthly statement.

L. O. Cummins, 1210 W. 31st St., Minneapolis, job # 289

|   |      |      |       |
|---|------|------|-------|
| 1 Atwater—Kent Distributor Head   |      | 5.15 |       |
| 2 Radia Spark Plugs   |      | 1.50 |       |
| 4—2 /12 G 6 D C Lamps   |      | 1.20 |       |
| 4—5 /16 x 3 /8 Hex Nuts   |      | .20  |       |
| War tax   |      | .40  |       |
| Grinding valves, cleaning carbon, straightening<br>braker points, and tightening front spring clips, 8½<br>hrs. labor | 1.00 | 8.50 | 16.95 |

Col. H. W. Davenport, 109 W. Minnehaha Parkway, Minneapolis, job # 297  
itch-Bowers Co. Invoice 7 /12

|   |     |       |        |
|---|-----|-------|--------|
| Repairing SL-4 Willard Stg. Bat. #2487612 |     | 9.85  |        |
| 10 days' rental                           |     | 2.50  | 12.35  |
| 1—35 x 4½ Goodyear Cord Tire              |     | 61.65 |        |
| 1—35 x 4½ Goodyear Tube                   |     | 15.10 |        |
| Revenue Tax 5%                            |     | 3.84  | 80.59  |
| 21 Gal. Gasoline                          | .28 |       | 5.88   |
| 2 Qts. Cyl. Oil                           | .40 |       | .80    |
| 1 Gal. Can 600 W Oil                      |     |       | 2.50   |
|   |     |       | 102.12 |

Mrs. Frances L. Hurlburt, 1171 Blaisdell Ave., St. Paul, job # 291  
verhauling ignition system, adjusting steering gear, tightening brakes, adjusting  
itch, new tail lamp, taking up lost motion on drive shaft toggles, and adjusting  
fferential gears and bearings.

|                           |      |       |       |
|---------------------------|------|-------|-------|
| 1 #70 Electric Tail Lamp  |      | 1.35  |       |
| 1 Toggle Pin              |      | 1.75  |       |
| 2 Tapered Pins            |      | .20   |       |
| 1 Magneto Point, Platinum |      | 4.80  |       |
| 4 Grease Cups             |      | .80   | 8.90  |
| War Tax                   |      |       | .45   |
| 11 Hrs. Labor Mechanic    | 1.25 | 13.75 |       |
| 4½ " " Helper             | .60  | 2.70  | 25.80 |

M. L. Pemberton, Hennepin Ave. & W. 29th St., Minneapolis

|                     |     |       |    |
|---------------------|-----|-------|----|
| 1 Account rendered  |     | 52.18 |    |
| 2 7 Gal. Gasoline   | 27  | 1.89  |    |
| 3 2 Pts. Cyl. Oil   | .20 | .40   |    |
| 5 15 Gal. Gasoline  | .27 | 4.05  |    |
| 5 2 Headlight Bulbs | .50 | 1.00  |    |
| War Tax             |     |       | 05 |

|    |                               |     |               |
|----|-------------------------------|-----|---------------|
| 9  | 12 Gal. Gasoline              | .28 | 3.36          |
| 12 | 2 Pa. Red Seal Tubes, 34 x 4½ |     | 12.20         |
|    | War Tax                       |     | .61           |
| 13 | 10 Gal. Gasoline              | .28 | 2.80          |
|    | 1 Qt. Cyl. Oil                |     | .40           |
|    | 3 Lbs. Transmission Grease    | .15 | .45           |
| 18 | 15 Gal. Gasoline              | .27 | 4.05          |
| 24 | 6 Gal. Gasoline               | .27 | 1.62          |
| 25 | 3 Pts. Cyl. Oil               | .20 | .60           |
| 26 | 1 Fan Belt                    |     | 1.20          |
|    | War Tax                       |     | .06           |
| 29 | 18 Gal. Gasoline              | .27 | 4.86          |
| 30 | 1 Mo. Live Storage            |     | 25.00         |
|    |                               |     | <u>116.78</u> |

## PUNCTUATION AND PARAGRAPHING

Letter 12 is an effective sales letter which we send out to prospective purchasers of Franklin cars.

**Assignment 7.** Write the letter to the following:

Mr. J. H. Warner, 629 Elwood Ave., Minneapolis

Mr. R. F. Shirley, 2927 S. Humboldt Ave., Minneapolis

Mr. K. F. Pierson, 1721 Minnesota St., St. Paul

## TRANSCRIBING

**Assignment 8.** The manager will dictate to you for transcription five letters from our regular correspondence.

## FILING

Occasionally it is desirable to keep a file by subjects. Special guides with tabs on which are printed subject headings are used. Various methods of subdividing subject files have been devised. In a library books are listed by subject. Ordinarily, however, two other sets of alphabetical card indexes are kept—one for the titles and the other for the authors' names. The field of subject filing in business offices is very limited.

**Assignment 9.** File your correspondence in this section in the alphabetical file. The carbons of the bills are to be filed in the Shannon file.

## SECRETARIAL PRACTICE

**Assignment 10.** The manager: "I think Mr. Cassell (a prospect) will like this trimming, No. 618 (see letter 2). Write Chase and ask them to quote us prices. Tell them the trimming is for a sedan. And by the way, drop a line

to Franklin (Franklin Motor Car Co., Syracuse, N. Y.) thanking them for the samples."

**Assignment 11.** The manager: "We had better get half a dozen additional copies of this Bulletin No. 127 (page 266)." (The Bulletin was issued by the Cole Motor Co., Indianapolis, Ind.)

**Assignment 12.** The manager: "I wish you would look through the file of the East Side Provision and let me know how the matter of payment of their account stands." You get the following data: Bill \$245.63 rendered May 1 regular terms (see bill, page 274). Wrote May 15 and June 6. No replies. Draft drawn July 2. Bank reports payment refused; no explanation.

The manager: "Well, this looks like a matter for the Fidelity (the collection agency in whose hands we place our accounts). Write these people once more, giving them the facts in your memorandum. Of course you want to be courteous, but be plain and straightforward. You can address the letter to the attention of the president." This is a local concern. The president is J. D. Margett.

**Assignment 13.** The manager: "Miss (Ethel) Long asked me for a letter of recommendation this morning. Says her people are moving to St. Louis. Write a little letter for me. You can see about getting a girl to take her place." You find that Miss Long has been with the company as a typist and filing clerk for four years, the last six months of which she has been working with you. She is an efficient worker—careful and accurate. Write an ad for insertion in the "Sun" and the "Times."

**Assignment 14.** The manager: "Put a memorandum on French's (Mr. French is a city salesman) desk asking him to run out and see Mr. Hauser some time this week. (See letter 11.)

**Assignment 15.** The manager: "Write Franklin telling them that we are in urgent need of immediate delivery of the three sedans we ordered three months ago. Ask them to tell us the earliest possible date that they can get the cars to us."

**Assignment 16.** The manager: "Send a copy of that agency contract which you rewrote to Mr. Corbett. Ask him to let us know if it is satisfactory."

# Carnegie Steel Company.

GENERAL OFFICES: CARNEGIE BUILDING.

Pittsburgh, Pa.

March 7, 1920.

Mr. T. J. Johnson,  
Purchasing Agent,  
New England Manufacturing Co.,  
New Bedford, Mass.

Dear Sir:

We are pleased to submit the following quotation on the forgings referred to in your letter of the 4th:

2 M. Piston Rods, per B/P E 7764 ..... \$.059 per lb.

We contemplate supplying the rods rough turned and bored, with an allowance to finish to the sizes shown on your blue print. Our quotation is on rods made of forged open hearth, 3 to 3 $\frac{1}{2}$ % nickel steel, showing chemical properties as follows:

|                              |                   |
|------------------------------|-------------------|
| Carbon .....                 | .35 to .60        |
| Manganese .....              | .40 to .70        |
| Phosphorus and Sulphur ..... | not less than .05 |

These rods would be annealed and tested to show the following minimum physical properties from a standard test bar, taken from a longitudinal prolongation of one end of the forging:

|                        |                             |
|------------------------|-----------------------------|
| Tensile Strength ..... | 85,000 lbs.                 |
| Elastic Limit .....    | 50,000 lbs. by extensometer |
| Elongation .....       | 20%                         |
| Contraction .....      | 39%                         |

We guarantee that these forgings will stand the test of a standard 1" bar, which can be bent through 180 degrees around a mandrel of 1/2" radius without showing signs of fracture on the outside of the bent portion.

We are in a position to make shipment within two months after receipt of the order.

Yours very truly,

CARNEGIE STEEL COMPANY.

*A. J. Batchelder*  
General Manager of Sales.

AGB/CEK

# IRON AND STEEL SECTION

## TECHNICAL TERMS

- alloy**—an artificial compound of two or more metals combined while in a liquid state.
- angle-iron**—a rolled or wrought bar of iron in the form of an angle used in construction work.
- annealing**—the process of treating metals by means of heat so as to remove their brittleness and make them easier to work.
- Bessemer steel**—steel made by a special process; so named from the inventor of the process.
- billets**—small bars of iron or steel for further manufacture.
- blast-furnace**—a furnace in which ores are melted by the aid of a blast of air.
- bloom**—a small cavity within a piece of metal filled with air or gas, making the metal defective.
- carbon**—a black elementary substance present in all organic compounds.
- cast-iron**—iron which has been cast; i.e., melted and run into molds in which it assumes the desired form.
- chemist**—a person whose business is to make chemical examinations and investigations.
- chromium**—a very hard brittle metallic element.
- contour**—the outline of a figure or body.
- corrugated**—bent or drawn into parallel furrows or ridges; as *corrugated* iron.
- crucible**—a hollow at the bottom of a furnace to receive the melted metal; also a portable vessel or pot for pouring molten metal.
- elastic limit**—the limit of extension, expansion, or contraction.
- elongation**—the state of being lengthened or extended.
- fabricate**—to construct or manufacture (especially iron and steel).
- flux**—conversion to a liquid state by the application of heat.
- forgings**—a general name for pieces of hammered iron or steel.
- foundry**—a place where metals are cast.
- fracture**—a break; a partial or total separation under the action of force.
- fusion**—a melting or rendering fluid by heat. Iron is thus said to possess the quality of *fusibility*.
- galvanometer**—an instrument for detecting the existence and determining the strength and direction of an electric current.
- high-speed steel**—an alloy steel suitable for cutting tools which work at a very high speed.
- ingot**—a mass of metal cast in a mold.
- longitudinal**—of or pertaining to length.
- mandrel**—a bar of metal holding work in a lathe.



- manganese**—a metal having in some respects a close resemblance to iron and used in the manufacture of iron.
- metallurgical**—pertaining to the working of metals.
- mica**—a mineral divisible into thin transparent plates or flakes.
- milling**—the process of shaping materials by the action of machinery.
- open-hearth steel**—a term applied to a particular method of manufacturing steel.
- phosphorus**—a non-metallic substance found in combination with various metals.
- pig-iron**—iron as it comes from the blast-furnace.
- pipe**—a cavity at the top of an ingot of steel caused by contraction during cooling in the manufacturing process.
- puddling**—the operation of transforming pig-iron into wrought iron in a furnace.
- rivet**—a short metal bolt passing through a hole and so fastened as to keep pieces of metal together.
- silicon**—a non-metallic element; rock crust; sand.
- slug**—a heavy piece of crude metal.
- smelting**—the process of treating ores for the purpose of separating the contained metal.
- splices**—plates to which the ends of rails are bolted to make a firm joint.
- structural steel**—steel used in construction work, such as bridges, buildings, etc.
- sulphur**—a yellow, brittle, natural element.
- tensile**—capable of being drawn out or extended in length or breadth. This quality of iron and steel is called *tensile strength*.
- transverse**—lying across or athwart of.
- vanadium steel**—a special alloy steel containing vanadium. *Vanadium* is a rare metal used in the manufacture of steel to increase its tensile strength.

## CORRESPONDENCE

I

Union Forging Company,  
Hammond, Ind.

Gentlemen:

We have just finished an order for crankshafts for the Packard Company. We used a high-grade nickel chromium | steel on this order. We have on hand a surplus supply of four hundred pieces 3-5/8" | round by 12" long, and 300 pieces 3 1/2" round by 36" long, | the total approximate weight being 4300 pounds. This steel analyzes as follows:

|           |     |
|-----------|-----|
| Carbon    | .44 |
| Manganese | .68 |

|                         |      |
|-------------------------|------|
| Sulphur                 | .034 |
| Phosphorus              | .018 |
| Silicon                 | .138 |
| Chromium                | .70  |
| Nickel   <sup>100</sup> | 1.45 |

The steel was manufactured by the United Alloy Steel Corporation of Canton, Ohio. It | is in first-class condition and is free from seams and other defects.

If you could use any of this | material for immediate delivery, we should be glad to quote you attractive prices, f.o.b. cars, Pittsburgh.

Very truly | yours, (161)

2

Mr. F. A. Black,  
 Manager of Sales,  
 Duluth, Minn.

Dear Sir:

We have your letter of the 25th enclosing inquiry from the Taylor Forging Company for 15,000 pounds of 2½" 12-lb. coils. The following specifications of chemical properties are called for:

|            |              |
|------------|--------------|
| Carbon     | .10 to .20   |
| Manganese  | .30 to .60   |
| Phosphorus | .04          |
| Sulphur    | .045         |
| Nickel     | 3.25 to 3.75 |

You are instructed to endeavor to have the upper manganese limit modified to .70. We shall withhold quotations until we receive your report.

It would also be advisable to endeavor to have the customer increase this order to about fifteen tons. The steel could then be worked in the electric furnace and delivery would be expedited. In that case, you will make it plain to the Taylor people that we do not accept specifications showing carbon under .15 in electric steels.

Very truly yours, (162)

3

La Belle Iron Works,  
 Steubenville, Ohio.

Gentlemen:

Your letter of the 14th was brought to the writer's attention this morning.

On the 90 lb. rails we can offer section #563, No. 2 open hearth, 33 ft. average lengths, drilled 1-13/16" hole, spaced 1-29/32" x 4" x 5-1/2", with splices, at the following prices:

|                     |                       |
|---------------------|-----------------------|
| Rails.....          | \$42.35 per gross ton |
| Splice Bars.....    | 9.22 per 100 lbs.     |
| Bolts and Nuts..... | 6.69 per 100 lbs.     |

Shipment could be made within two weeks after receipt of order.

We regret to say that we do not have any of the sizes of nut piercer steel and extra high speed steel specified by you in stock at the present time. On the double extra high speed bits, however, we could make shipment in about two weeks. The other items would take approximately ten weeks to manufacture. Our stock of high speed steels in all of our warehouses has been almost exhausted by the heavy demands for this class of material during the past month or two.

Very truly yours. (198)

4

Carnegie Steel Co.,  
Carnegie Building,  
Pittsburgh, Pa.

Gentlemen:

The writer has discussed with Mr. W. G. Greene the matter of the sulphur content in recent shipments of steel to the Standard Machine Tool Company. He maintains that his company cannot make any modification whatever in sulphur, although he gave no valid reasons why they could not accept a slightly modified sulphur content as other tool manufacturers have done. He stands firmly on his decision that .045 on check must be the limit. He has accepted three shipments that ran .047, .048, and .05 on check, but he insists that these were exceptions. I have made it perfectly plain to Mr. Greene that we must have a limit in sulphur of .05 and .055 on check.

Our shipments to the Standard people have been quite heavy during the past two months. In January we shipped them 362 tons and in February 245 tons. They probably do not need steel at this time and there would be little use in threatening to hold up shipments until they agreed to accept a lower standard of sulphur content.

Yours truly, (202)

5

Warner Tractor Co.,  
Dubois, Pa.

Gentlemen:

We have your letter of the 4th instant enclosing specifications for

300 to 500 tons of nickel slabs, 14" x 4" x 400 to 500. We are not in a position to maintain a proposition involving the chemical analysis specifications.

For open hearth nickel steel would require a range of ten in carbon, twenty points in manganese, with a maximum in phosphorus, sulphur, and silicon of .04 and .20 respectively. Further it would be necessary for us to have a range of 3.25 to 3.75 nickel content.

For electric nickel steel, we are obliged to ask for substantial same revision in the specifications, the exceptions being in the phosphorus, sulphur, and silicon content, in which we would require a maximum of .025, .03, and .04 respectively.

In case you could use material manufactured in accordance with specifications revised to meet the above ranges, we shall be glad to have your order. Shipment of material would begin within six weeks from receipt of the order.

In case you decide to place an order with us, satisfactory terms will be arranged.

Yours very truly, (220)

6

Carter Mine Supply Company,  
Altoona, Pa.

Gentlemen:

In reference to your inquiry of the 12th we are unable to quote prices at the present time. We are heavily oversold on this item.

With regard to the bars we have that the first three items are

and on these we can quote per 100 pounds, base f.o.b. | urgh, plus extras as per our f May 1. On the balance of r items our price | would be per 100 pounds, f.o.b. Pitts- plus extras as per our card of 100 15. These quotations are on furnishing soft Bessemer or earth at our option.

We could begin shipment on | aterial in about six weeks and ete the order in from four to onths, provided the tonnage re- | is reasonable.

We note also your inquiry as to We have on hand at the t time some 10-3/8" | and 13 1/4" slugs. The stock is constantly ng so that it is | impossible to a stock list. The slugs will om .36 to .44 carbon and | 200 gths will be from 16" to 40". uote a price of \$40 per gross f.o.b. Coatesville.

Very truly yours, (227)

7

Forging Co.,  
Empire Bldg.,  
Decatur, Ill.

men:

We have your letter of the 19th. ish to confirm our statement he tests which we gave | you made from pieces of the 5 1/2" e chrome nickel blooms manu- ed for you for | axle forgings, erse tests only being taken; hat the steel had been treated ler to meet the standard | re- nents of the American Forging y for forgings which require

95000 # Tensile Strength  
65000 # | Elastic Limit  
18% Elongation  
30% Reduction

We understand that the tests you reported were taken from | 100 each end of the forging, one being undoubtedly a longitudinal test, and it is therefore our belief that because of | our treatment for the lower tensile and the difference in the location of the test pieces, the two tables are | not directly comparable. We there- fore maintain that the steel furnished is fully suitable for the purpose in- tended if properly treated, | and that we have fulfilled our agreement to furnish material of the chemical requirements specified. We work to chemical requirements | only, and agreed to furnish material free from pipes and other injurious defects but assumed no responsibility for the physical | 200 properties after forging or heat treatment.

However, in order to assist you in the matter, we shall arrange to dis- pose | of the two cars returned and will notify you within a day or two regarding the disposition of the steel | in question to the Union Tool & Forge Company.

Yours very truly, (252)

8

Mr. R. K. Adams,  
Manager of Sales, Carnegie Steel  
Co.,  
Scranton, Pa.

Dear Sir:

We acknowledge receipt through your office of Frank A. Bradley & Company's order B-431 of | Feb-

ruary 21, for 2500 net tons of plain electric carbon steel billets, 8" square, to be | cold sawed in 16" lengths, with a leeway of 2" over and under. In manufacturing this steel, which | will be furnished by the Homestead plant, we will work to the analysis specified in the analysis clause appearing on | the face of the customer's order, with the reservation that we shall insist upon the following arbitration limits between the | <sup>100</sup> readings of two or more chemists:

Carbon .03; that is, since the specification for carbon is .72 | to .82, the customer will accept steel analyzing from .69 to .85 carbon. |

Phosphorus and sulphur combined .005; specification .05, the customer to accept steel wherein the combined | phosphorus and sulphur analyzes .055 or less.

Manganese .03; specification .20 to .30, | the customer to accept steel analyzing .17 to .33.

Furthermore, if the steel analyzes | <sup>100</sup> outside of these ranges and the results we obtain differ only one or two points from those obtained by an | outside chemist, we shall expect the privilege of verifying his figures.

This feature of the delivery will have our best | attention, and 100 tons will be rushed forward with all possible dispatch. The balance of the tonnage will be | shipped at the rate of 75 to 100 tons weekly thereafter.

We also note that the delivery instructions | apply to the balance

due on order B-367 of January 3. We will extend to the customer | <sup>100</sup> the right, upon due notice, of reducing the amount to be shipped monthly, but it must be understood and agreed | that the entire tonnage involved must be taken out during the current year.

We are proceeding with the execution of | this order as outlined above. If there are any points which have not been covered in accordance with the customer's | wishes, kindly inform us immediately.

Yours very truly, (368)

o

Mr. Walter J. Cooney,  
Manager, Export Sales Department,  
New York City.

Dear Sir:

Subject: Canadian Pacific Contract

After a conference with our department heads and plant superintendents, we find we are | in a position to bid on this contract, which covers 25,000 gross tons of 80-pound rails to | customer's blue-print X-22; 14,250 gross tons of 60-pound rails to blue-print X-23, | both standard sections, with necessary angle splice bars, bolts, nuts, and nutlocks; 4000 gross tons of tie plates | for the 80-pound rails; and 2250 gross tons for the 60-pound rails.

It is our | <sup>100</sup> understanding that the rails are to be of open hearth steel to your specifications dated November 12, also the splice | bars, bolts and nuts, but that the tie

s and nutlocks are to conform manufacturer's standard; rails to in 40-foot lengths with 10% of er lengths down to and including eet, the question | of lengths | ct to revision; shipments to come during the first quarter of next or earlier if possible, and | in event not later than the second of next year.

The rail sections and splice bars d all | <sup>200</sup> be rolled on the Clair-mill, with the probable exception | splice bars for the 60-pound rail on, which | are rather small for mill, but could be rolled at our plant.

It would require about eight s | to prepare rolls for the rails, cost of approximately \$2100 for section, while for | the splice it would take about twelve s for roll preparation at a cost of t \$900 | for each section. Our extra of \$2 per gross ton should sessed for the forty-foot lengths, and if milling the ends of the is desired we would require an of \$4 per gross | ton for milling ends, or \$2.50 per gross ton for 1g one end.

The necessary equipment | to cate each section of the splice would cost approximately \$500, total of \$1000 | for both sec-, and we should have an extra of er gross ton for punching in , | \$1.50 per gross ton for ling in pairs, and \$1 per gross for oiling in | <sup>400</sup> pairs. The ating equipment could be ready

within about four weeks after receipt of definite instructions.

We could doubtless make | the delivery required for the rails and splices if the order is placed promptly, but shipments will be subject to | delays on account of strikes and other causes beyond our control.

We presume you will confer immediately with the Canadian | Pacific people upon receipt of this information.

Yours very truly, (470)

10

Dr. C. B. Harwood,  
Dean, School of Engineering,  
University of Michigan,  
Ann Arbor, Mich.

Dear Sir:

Your letter of the 14th instant has been referred to our Metallurgical and Research Laboratory. We are very | glad to outline for you our method of hardening and annealing high speed steel.

In the proper hardening of high | speed steel the particular character of the tool to be produced, the fire, and the furnace must be taken into | consideration. The maximum heat should not exceed 2400 degrees Fahrenheit, and the minimum not less than 2000 | degrees. A standard "V" shaped threading die, of the type mentioned in your letter, when heated in an open fire | <sup>100</sup> would be ruined at a heat considerably below that permissible for a lathe or planer tool. When an electric, gas, | or oil-heated furnace is employed and the

fire does not come into direct contact with the die, it is our practice to heat our steels to 2200 degrees Fahrenheit or even higher, without apparent injury to the tool. Tools heated in this way are always more efficient in service than when hardened from an open fire.

We harden lathe, planer, and similar tools by heating them in two stages in a clean fire or furnace, the heat being confined as nearly as possible to the cutting edge. The tool is first heated slowly, thoroughly, and uniformly from 1500 degrees to 1700 degrees Fahrenheit. The preheated tool is then immediately exposed to an intense heat until the steel fluxes freely on the cutting edge. High speed steel is best when hardened from a high heat, but it should not be left exposed to this high heat one second longer than is absolutely necessary. After the tool has been brought to the required temperature, it is removed from the fire and cooled with either a dry blast of air or by quenching in oil. Quenching in oil gives good results, but our experience has demonstrated that high speed steel is more safely worked and is just as satisfactory when cooled in an air blast.

In annealing high speed steel we use an iron box or pipe of sufficient size to allow at least one-half inch of packing between the piece of steel to be annealed and the walls of the container. The packing consists of powdered charcoal, fine

dried lime, or mica chips. The lid should be reasonably air-tight. The steel is then subjected to a clear red heat, about 1475 to 1500 degrees Fahrenheit and held at this point from two to eight hours, depending upon the size of the piece to be annealed. A piece 2 x 1 x 8" long requires about three hours. The steel is cooled as slowly as possible and is not exposed to the air until cold. We have found it desirable to allow the container to remain in the furnace to cool down with the steel.

On the occasion of your proposed visit to our furnace we shall be very glad to show you the whole process.

Yours very truly, (508)

11

Mr. Chas. A. Gordon,  
General Manager, United States  
Car Wheel Co.,  
Pittsburgh, Pa.

Dear Mr. Gordon:

Pursuant to the instructions contained in your communication of April 24, we have undertaken a discussion with the General Electric Company and the Baldwin Locomotive Works looking towards the standardization of a type of wheel that would be satisfactory to both companies, and which could be used on existing locomotives in the way of replacements with the least possible change. Our efforts have been successful as far as we have carried

<sup>1</sup> This word is often confused with *informally*.

negotiations, and we must now talk to you so that you may call plant superintendents into consultation.

The final design of the proposed wheels is shown on drawings 942 and 943, two copies of which are enclosed, together with two sets of drawings #944 to 953 inclusive, the latter being marked with circles to blue-prints now at mills. By reference to drawings 942 and 943 you will note that our proposals contemplate wheels of a rim width of 4-1/8" and 5-1/2" high and 1" thick, with gage thicknesses of rim corresponding to the diameters of the wheels, the wheels to be made of steel with hub lengths of 5 1/2" and 6". Drawings 944 to 948 show proposed locomotive wheels which are in accordance with the Baldwin Locomotive Works standards, but at the bottom noted in yellow on our own mill drawing numbers 944 to 948 we have offered heretofore in substitution and which you will note do not exactly conform to the Baldwin standards. Drawings 949 to 953, inclusive, show wheels of the General Electric Company's standards and are marked in the same way in yellow. 949 to 953 are the drawing numbers of the mill which we have heretofore used in substitution.

The General Electric Company has agreed to accept these new standards as shown on drawing 942 as rim width, hub diameter, hub diameter, and height of flange are con-

cerned, but they desire a slight modification in the flange contour which is still under discussion, but which will not affect the height of flange or any essential dimensions, as the difference between them and us have to do with the radius at the throat. Any departure they may desire from the flange contour shown may be taken up in the machining.

The Baldwin people have accepted our proposals exactly as shown on drawing 943, with the exception that in the case of the 24" wheel they still desire to retain the 3 3/4" width of rim; in other words they prefer to use drawing 944 instead of drawing 943 for the 24" wheel. The 944 drawing corresponds to our T-100 and our suggestion is that we accede to their wishes.

As you know these proposals have been predicated on the assumption that the existing equipment can be modified at very slight expense to produce this entire series of standardized wheels. Inasmuch as the new designs conform to standard principles of wheel design, we have proceeded on the basis that they would be entirely satisfactory to our Works; at least we did not consider it necessary to submit the drawings to the Works for criticism until we had at least received the preliminary consent of our customers to the adoption of the proposed standards.

We would now like to have you submit the matter to the superintendents for any criticisms they may



have to these drawings as affecting mill operations. It is our expectation that if these wheels are as satisfactory to the mills as they are to our customers, it will be possible under normal conditions to roll them and to hold small quantities in stock for application on orders.

Respectfully submitted, (656)

12

we are very glad to reply to your inquiry of the . . . . as to our high-grade magnet steel we have made a special and exhaustive study of the manufacture of this steel based on the most advanced metallurgical principles our claim of unexcelled permanent magnetic properties is supported by the fact that we are regu-

larly furnishing this grade of steel to the largest and most exacting makers of magnetos meters galvanometers and similar instruments this steel requires the most careful attention in manufacturing both as to chemical composition and mechanical treatment as the result of our extensive tests we have the fullest confidence that it combines all those chemical and physical characteristics necessary to produce the highest permanence uniformity and strength this steel is furnished in bars and sheets of all required dimensions we should be pleased to learn the precise use to which you intend to put this material in case you have any special problems our engineering department is at your service yours very truly

### OFFICE TRAINING ASSIGNMENTS

In this section you are working in the office of the manager of sales in the general offices of the Carnegie Steel Company, Pittsburgh, Pa.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

Since the tabulated items in the style letter are few in number, they are prominently displayed by being written double space.

**Assignment 1.** Copy the style letter with carbon on form 42.

**Assignment 2.** Copy letter 3 with carbon on a letterhead. Present for signature.

#### ESTIMATE SHEETS

For the purpose of making quotations we prepare statements showing the average price per pound on different kinds and grades of steel, similar to the statement on the following page.

| Section No. | Quantity             | Price lb. | Total              |
|-------------|----------------------|-----------|--------------------|
| 420         | 490,000 lbs.         | @ .06     | \$ 29,400.         |
| 421         | 65,000 lbs.          | @ .075    | 4,875.             |
| 422         | 26,250 lbs.          | @ .0775   | 2,034.38           |
| 423         | 12,500 lbs.          | @ .07375  | 921.88             |
| 424         | 77,000 lbs.          | @ .0675   | 472.50             |
| 425         | 34,600 lbs.          | @ .064    | 2,214.40           |
| 426         | 1,000 lbs.           | @ .07125  | 71.25              |
| 427         | 95,000 lbs.          | @ .06     | 5,700.             |
| 428         | 30,000 lbs.          | @ .07     | 2,100.             |
| 429         | 12,500 lbs.          | @ .074    | 925.               |
| 430         | 115,000 lbs.         | @ .05875  | 6,756.25           |
| 431         | 10,900 lbs.          | @ .0825   | 899.25             |
| 432         | 1,120 lbs.           | @ .1225   | 137.20             |
| 433         | 10,400 lbs.          | @ .06     | 624.00             |
| 434         | 6,100 lbs.           | @ .063    | 321.30             |
| 435         | 546,600 lbs.         | @ .0625   | 3,412.50           |
| 436         | 80,000 lbs.          | @ .0825   | 6,600.             |
| 437         | 646,000 lbs.         | @ .065    | 41,990.            |
| 438         | 140,000 lbs.         | @ .08625  | 12,075.            |
|             | <hr/> 1,836,970 lbs. |           | <hr/> \$121,529.91 |

Average price per pound . . . . .06615

**Assignment 3.** Make a copy with carbon of the above statement.

#### STATEMENT OF ORDERS IN PROCESS

The following statement gives details of orders placed in process in our plant today. With each order there is shown its blue-print number, name of the piece, the date on which the order was received, the number of pieces called for, the price of the steel per lb., the weight of the finished piece, the price of each piece, and our percentage of profit.

Orders Placed in Process  
April 14, 1920

| B.P.<br>No.                 | Name of<br>Piece | Date | No.<br>Pcs. | Steel<br>per<br>lb. | Wt.   | Price    | Per<br>cent.<br>Profit |
|-----------------------------|------------------|------|-------------|---------------------|-------|----------|------------------------|
| Packard Motor Car Company   |                  |      |             |                     |       | (615.00) |                        |
| K 130                       | Crank Shafts     | 6-18 | 15000       | 4¢                  | 52    | (749.00) | 50                     |
| K 180                       | Conn. Rods       | 6-28 | 25000       | 4¢                  | 3     | 60.00    | 33-1/3                 |
| K 200                       | Cam Shaft        | 6-28 | 10000       | 4¢                  | 10½   | 135.00   | 33-1/3                 |
| Hayes Wheel Company         |                  |      |             |                     |       |          |                        |
| 1503                        | Hub              | 6-12 | 10000       | 4¢                  | 12    | 145.00   | 33-1/3                 |
| Timken Detroit Axle Company |                  |      |             |                     |       |          |                        |
| CX 1843                     | Knuckle          | 7-9  | 5000        | 8¢                  | 54    | 725.00   | 50                     |
| T 7041                      | Axle             | 7-8  | 2500        | 8¢                  | 242   | 5100.00  | 50                     |
| Dayton Engineering Company  |                  |      |             |                     |       |          |                        |
| 23143                       | Lever            | 7-22 | 7500        | 4¢                  | ¼     | 4.00     | 50                     |
| 26660                       | Pole Piece       | 6-14 | 22000       | 4¢                  | 4¼    | 37.00    | 50                     |
| 28628                       | “ “              | 7-31 | 1000        | 4¢                  | 1-3/8 | 15.00    | 50                     |
| 29036                       | “ “              | 5-23 | 3500        | 4¢                  | 1¼    | 13.00    | 50                     |
| Hudson Motor Car Company    |                  |      |             |                     |       |          |                        |
| 355                         | Gear             | 7-8  | 2000        | 4¢                  | 3     | 34.00    | 50                     |
| D 387                       | C. Levers        | 3-29 | 5250        | 4¢                  | 1¾    | 40.00    | 50                     |
| 6331                        | Clutch Drum      | 6-11 | 2000        | 4¢                  | 11    | 200.00   | 50                     |
| 9806                        | R. G. Shafts     | 6-10 | 1500        | 4¢                  | 1-1/8 | 14.25    | 50                     |
| 9809                        | Gear             | 7-11 | 2500        | 4¢                  | 6½    | 64.00    | 50                     |

**Assignment 4.** Make a copy of this statement with carbon.

SPECIFICATIONS

The Union Switch & Signal Company has requested us to send them two copies of the castings specifications prepared by the American Society for Testing Materials. These specifications are as follows.

## AMERICAN SOCIETY FOR TESTING MATERIALS

Standard Specifications for  
Steel Castings

1. Classes—These specifications cover two classes of castings, namely:

Class A, ordinary castings for which no physical requirements are specified:

Class B, castings for which physical requirements are specified. These are of three grades: hard, medium, and soft.

2. Patterns—(a) Patterns shall be made so that sufficient finish is allowed to provide for all variations in shrinkage.

(b) Patterns shall be painted three colors to represent metal, cores, and finished surfaces. It is recommended that core prints shall be painted black and finished surfaces red.

3. Basis of Purchase—The purchaser shall indicate his intention to substitute the test to destruction specified in Section 11 for the tension and bend tests, and shall designate the patterns from which castings for this test shall be made.

## I. Manufacture

4. Process—The steel may be made by the open hearth, crucible, or any other process approved by the purchaser.

5. Heat Treatment—(a) Class A castings need not be annealed unless so specified.

(b) Class B castings shall be allowed to become cold. They shall then be uniformly reheated to the proper temperature to refine the grain (a group thus reheated being known as an “annealing charge”), and allowed to cool uniformly and slowly. If, in the opinion of the purchaser or his representative, a casting is not properly annealed, he may at his option require the casting to be re-annealed.

## II. Chemical Properties and Tests

6. Chemical Composition—The castings shall conform to the following requirements as to chemical composition:

|                 | Class A                 | Class B                 |
|-----------------|-------------------------|-------------------------|
| Carbon.....     | not over 0.30 per cent. | .....                   |
| Phosphorus..... | not over 0.60 per cent. | not over 0.05 per cent. |
| Sulphur.....    |                         | not over 0.05 per cent. |

7. **Ladle Analysis**—An analysis to determine the percentages of carbon, manganese, phosphorus, and sulphur shall be made by the manufacturer from a test ingot taken during the pouring of each melt, a copy of which shall be given to the purchaser or his representative. This analysis shall conform to the requirements specified in Section 6. Drillings for analysis shall be taken not less than  $\frac{1}{4}$  inch beneath the surface of the test ingot.

8. **Check Analysis**—(a) Analyses of Class A castings may be made by the purchaser, in which case an excess of 20 per cent. above the requirement as to phosphorus specified in Section 6 shall be allowed. Drillings for analysis shall be taken not less than  $\frac{1}{4}$  inch beneath the surface.

(b) Analyses of Class B castings may be made by the purchaser from a broken tension or bend test specimen, in which case an excess of 20 per cent. above the requirements as to phosphorus and sulphur specified in Section 6 shall be allowed. Drillings for analysis shall be taken not less than  $\frac{1}{4}$  inch beneath the surface.

### III. Physical Properties and Tests (For Class B Castings Only)

9. **Tension Tests**—(a) The castings shall conform to the following minimum requirements as to tensile properties:

|  | Hard   | Medium | Soft   |
|--|--------|--------|--------|
| Tensile strength, lbs. per sq. in. . . . . | 80,000 | 70,000 | 60,000 |
| Yield Point, lbs. per sq. in. . . . .      | 36,000 | 31,500 | 27,000 |
| Elongation in 2 in., per cent. . . . .     | 15     | 18     | 22     |
| Reduction in area, per cent. . . . .       | 20     | 25     | 30     |

(b) The yield point shall be determined by the drop of the beam of the testing machine.

10. **Bend Tests**—(a) The test specimen for soft castings shall bend cold through 120 degrees, and for medium castings through 90 degrees, around a 1-inch pin, without cracking on the outside of the bent portion.

(b) Hard castings shall not be subject to bend test requirements.

11. **Alternative Tests to Destruction**—In the case of small or unimportant castings, a test to destruction on three castings from a lot may be substituted for the tension and bend tests. This test shall show the material to be ductile, free from injurious defects, and suitable for the purpose intended. A lot shall consist of all castings from one melt, in the same annealing charge.

12. Test Specimens—Sufficient test bars, from which the test specimens required in Section 13(a) may be selected, shall be attached to castings weighing 500 pounds or over, when the design of the castings will permit. If the castings weigh less than 500 pounds, or are of such a design that test bars cannot be attached, two test bars shall be cast to represent each melt; or the quality of the castings shall be determined by tests to destruction as specified in Section 11. All test bars shall be annealed with the castings they represent.

13. Number of tests—(a) One tension and one bend test shall be made from each annealing charge. If more than one melt is represented in an annealing charge, one tension and one bend test shall be made from each melt.

(b) If any test specimen shows defective machining or develops flaws, it may be discarded; in which case the manufacturer and the purchaser or his representative shall agree upon the selection of another specimen in its stead.

(c) If the percentage of elongation of any tension test specimen is less than that specified in Section 9(a) and any part of the fracture is more than  $\frac{3}{4}$  inch from the center of the gauge length, as indicated by scribe scratches marked on the specimen before testing, a retest shall be allowed.

#### IV. Workmanship and Finish

14. Workmanship—The castings shall conform substantially to the sizes and shapes of the patterns, and shall be made in a workmanlike manner.

15. Finish—(a) The castings shall be free from injurious defects.

(b) Minor defects which do not impair the strength of the castings may, with the approval of the purchaser or his representative, be welded by an approved process. The defects shall first be cleaned out to solid metal; and after welding, the castings shall be annealed, if specified by the purchaser or his representative.

(c) The castings offered for inspection shall not be painted or covered with any substance that will hide defects, nor rusted to such an extent as to hide defects.

#### V. Inspection and Rejection

16. Inspection—The inspector representing the purchaser shall have free entry, at all times while work on the contract of the purchaser is being performed, to all parts of the manufacturer's works which concern the

manufacture of the castings ordered. The manufacturer shall afford the inspector, free of cost, all reasonable facilities to satisfy him that the castings are being furnished in accordance with these specifications. All tests (except check analyses) and inspection shall be made at the place of manufacture prior to shipment, unless otherwise specified, and shall be so conducted as not to interfere unnecessarily with the operation of the works.

17. Rejection—(a) Unless otherwise specified, any rejection based on tests made in accordance with Section 8 shall be reported within five working days from the receipt of samples.

(b) Castings which show injurious defects subsequent to their acceptance at the manufacturer's works will be rejected, and the manufacturer shall be notified.

18. Rehearing—Samples tested in accordance with Section 8, which represent rejected castings, shall be preserved for two weeks from the date of the test report. In case of dissatisfaction with the result of the tests, the manufacturer may make claim for a rehearing within that time.

**Assignment 5.** Copy the specifications with two carbons. Submit all work for approval.

#### PUNCTUATION AND PARAGRAPHING

Letter 12 is a reply to inquiries regarding our magnet steel.

**Assignment 6.** After deciding upon the punctuation and paragraphing, write the letter with carbon to the following:

Munsey Gear Works, Muncie, Ind. Their letter to us is dated four days ago.

Union Switch & Signal Company, Swissvale, Pa. They wrote us two days ago.

#### TRANSCRIBING

**Assignment 7.** The manager of sales will dictate to you five letters from our correspondence. Transcribe these letters with carbons.

#### FILING

Each folder in the vertical file will hold from fifty to seventy-five letters. At stated intervals, usually at the end of the year, correspondence is removed from the files and placed for safekeeping in "transfer cases." Sometimes it is desirable to prepare new folders for all correspondents at the beginning of the

ear, which are placed in front of the old folders. The old folders are kept in the files for a period of three months and then transferred. All correspondence from the first of the year is placed in the new folders. The object, of course, is to facilitate reference to the correspondence of the previous few months.

**Assignment 8.** File your letters in the alphabetic-numeric file, as explained on page 223.

#### SECRETARIAL PRACTICE

**Assignment 9.** The manager: "Write the Union Switch (see page 290) sending them the copies of the specifications they asked for. You might tell them that the Society now has a committee at work which will probably report on some minor changes in these specifications soon." The letter to which you are replying is written from the main office of the company at Swissvale, Pa., and was signed by J. A. Bolton, vice-president.

**Assignment 10.** "Here's another letter (No. 4) from Mason on that Standard matter. Wire him that we must positively insist on the modified sulphur content and that we will refuse to make any further shipments unless they allow us the limit in sulphur we asked. Write the Standard people telling them about Mason's report. State our position in the matter courteously but plainly." The Standard Company is located at Cleveland. Mr. Mason, whose initials are E. F., is staying at the Hotel Winton in that city.

**Assignment 11.** The manager: "You say we haven't had any reply from the Warner Tractor? (See letter 5.) Better write them again asking if they can change their specifications to meet our suggested ranges. Blake (the mill superintendent) called me up yesterday. He says he will have several idle furnaces in reserve for four weeks with which he could take care of this order very nicely."

**Assignment 12.** The manager: "Write to the Dayton Engineering Co., Dayton, Ohio, informing them that we started work today on the orders which they placed with us recently. Better give them blue-print numbers as well as the dates of the orders. (See page 290.)"



Subject: **Underground Circuit - Richmond, Va. - Your File No. 6537**

# American Telephone & Telegraph Company

EXCHANGE BUILDING

300 SOUTH BROAD STREET

Office of  
District Plant Chief

Richmond, Va. April 20, 1920.

File 4328-D-HMB-4

Mr. S. K. Stevenson,  
Division Superintendent of Plant,  
Philadelphia, Pa.

Dear Sir:

This will reply to your letter of May 17. I have discussed with Mr. Hayward, of the Southern Bell Telephone & Telegraph Company, their plans for underground circuit in the city of Richmond. The only condition made by the Southern Bell Company was that they would not consider any proposition involving the joint ownership of cable.


I enclose a drawing showing the lines of conduit which they are now building in Richmond. No toll cable will be laid by them at this time in the new ducts on Market Street from Seventh to Federal, or on Federal Street from Market to the city limits. By the terms of the ordinance, the Southern Bell Company, upon the completion of conduits and cables shown on the drawing, is required to remove all overhead lines belonging to them on streets under which they have conduit.

After carefully canvassing the whole situation and in view of the construction work which has been undertaken by the Southern Bell Company, I recommend that we be authorized to proceed with the following work:

- First. Build a connecting line between pole No. 3610 of the Washington-Norfolk Line and pole No. 280 of the Richmond-Lynchburg Line.
- Second. Lay a 30-pair 13-gauge cable from 21st and Federal Streets to the Richmond Central Office.
- Third. Remove our wires and cross-arms from poles Nos. 1 to 280 of the Richmond-Lynchburg City Line.
- Fourth. Remove our wires and cross-arms from poles Nos. 3832 to 3914 of the Washington-Norfolk Line.

Estimates covering the cost of the work recommended above, together with maps showing the locations of the portions of the plant involved, are enclosed.

Yours truly,

  
Assistant District Plant Chief

Enc. 5

## TELEPHONE SECTION

### TECHNICAL TERMS

- calculagraph**—an instrument employed in long distance telephoning for recording the length of time during which a subscriber has the use of the line.
- commutator**—a device for reversing the directions of electric currents in any circuit; the copper bars on the rotating element of a D.C. machine.
- composite**—compound; consisting of several parts, as a *composite* ringer.
- condenser**—an apparatus for accumulating electric energy.
- conductivity**—the quality of any substance considered with reference to its capacity to transmit an electric current.
- diaphragm**—a thin piece of metal in a telephone instrument which transmits the sound.
- duplex**—double; a system of telephony by which two messages are transmitted at the same time over a single wire.
- gauge**—a unit for the measurement of the thickness of wire.
- grounding**—leaking of an electric current into the ground. A *grounded wire* is one that is in contact with the earth or other non-conductor.
- insulator**—a contrivance usually made of glass or porcelain for supporting wires and at the same time preventing loss of current.
- intercommunicating**—a term applied to a telephone system which has a switchboard at every station, thus requiring no central station.
- jack**—a metallic wedge inserted into the terminals in a switchboard to make connections between subscribers' lines. A *monitoring jack* is one which permits a supervisor to listen in on a busy line to see that efficient service is being given.
- metallic**—of or pertaining to metal.
- microfarad**—the practical unit of electrical capacity.
- Morse service**—telegraph service so called after the inventor of the telegraph.
- multiplex telephony**—a system of telephony in which more than two messages can be sent in opposite directions over the same wire at the same time.
- multi-voltage**—having many voltages.
- non-commercial** (“NC”)—a term used to indicate that a circuit does not transmit sound in sufficient volume to make the service of value to the subscriber.
- non-conductor**—any substance which does not allow the passage of electricity through it. Various substances used as insulators are thus *non-conductors*.
- originating operator**—the operator at a telephone exchange who receives the original call and transmits it to another exchange.
- phantom circuits**—a name given to the extra circuits which can be established over a number of single pairs of wires in *multiplex telephony*.
- repeater**—an arrangement of electrical instruments and apparatus for repeating a telephone message coming over one line to go forward over another line.

- retardation coils**—coils used to decrease the speed of telegraph signaling.
- section lineman**—an employe who attends to keeping the poles, wires, etc., of a certain section of telephone line in good condition.
- service observer**—an employe whose duty consists of checking the work of the operators.
- simplex**—a term used to indicate that only one message can be sent over a telephone line at a time.
- sublicense**—to license to another company under the provisions of a license already held by the company so licensing. The company to whom the sublicense is granted is called the *sublicensee*.
- subscriber**—one who receives telephone service on a contract basis.
- switchboard**—a group of sections or panels, including the apparatus by means of which intercommunication between subscribers is effected.
- tandem**—double; in pairs; a circuit over which two messages can be sent at the same time.
- tertiary**—third in order or succession.
- transmitter**—the part of a telephone instrument into which the speaking is done, as distinguished from the receiver, which is the part applied to the ear in receiving the message.

## CORRESPONDENCE

Mr. James C. Watkins,  
District Traffic Chief,  
Sacramento, Calif.

Dear Sir:

We submit for your approval drawing No. X-1968, which shows two listening circuits for enabling a number of student operators to listen in on a regular A or B operator. The condenser shown in the ring side of the cord is to prevent direct current from flowing in the circuit should the plug be inserted inadvertently into other than a regular monitoring jack. It will be noted that in one of the arrangements a one-way repeater is employed in order to satisfactorily care for a large number of listeners.

The increase in the use of toll switching trunks and tandem trunks in loaded duplex cables is making it desirable to develop new types of inequality ratio phantom repeating coils which will be suitable also for battery supply purposes, since none of the phantom coils or battery supply coils are suitable for this combination service, and it is not economical to use separate coils for terminating the phantom circuits and for battery supply.

The adjusting equipment consists of a tripping relay adjusting circuit and a supervisory relay adjusting circuit made up of a combination of interrupter rings, relays, coils, resistances, etc., arranged as shown on the drawing and

terminated in several jacks at the switchboard and at the racks where the supervisory and tripping relays are mounted. For every adjusting circuit there is a corresponding con-

trol jack, which is multiplied as often as necessary to make the circuit within easy reach of any tripping or supervisory relay.

Yours very truly,(255)

2

Mr. W. G. Morgan,  
District Traffic Chief,  
Harrisburg, Pa.

Dear Sir:

I spent yesterday in Carbondale, Pa., making service tests and interviewing subscribers. I talked with Mr. R. W. Rush, General Manager of the Logan Manufacturing Company, in regard to his general service, which he seemed to consider satisfactory with the exception of rather long delays on calls. As he had had trouble with Pittsburgh, I put in a call from his telephone and succeeded in making the connection after a delay of thirty-three minutes. Transmission was commercial and the subscriber seemed to be entirely satisfied with that phase of the call. I also interviewed several other subscribers<sup>100</sup> and they seemed to think well of our toll service, although they use the local service of the opposition more than they do ours.

Other service tests were made as follows:

Carbondale to Newark, N. J.

|                                       |            |
|---------------------------------------|------------|
| Answer by A operator                  | 11 seconds |
| Answer by L. D. <sup>1</sup> operator | 20 seconds |
| Start of message                      | 37 minutes |
| Transmission                          | A          |

Carbondale to New York City

|                          |            |
|--------------------------|------------|
| Answer by A operator     | 4 seconds  |
| Answer by L. D. operator | 12 seconds |
| Start of conversation    | 5 minutes  |
| Transmission             | B          |

Opposition Service—Carbondale to Philadelphia

|                             |            |
|-----------------------------|------------|
| Answer by L. D. operator    | 3 seconds  |
| Start of conversation       | 18 minutes |
| Transmission <sup>200</sup> | B          |

There were no delays on calls on our line between Carbondale and Scranton, although I was unable to learn definitely where the call was held up. The district agent reports that they have ample facilities for all their toll business between these points but are frequently delayed beyond Scranton.

Yours very truly, (255)

<sup>1</sup> Long Distance. Long distance service is also referred to as toll service. The "A" operator is the local or "answering" operator.

3

Mr. Wilson M. Carey,  
Service Observer,  
Norfolk, Va.

Dear Sir:

This is to bring to your attention a new arrangement of the auxiliary signal relays to be used in connection with common battery switchboards where multiple answering jacks and lamps are employed in connection with subscribers' or other types of line circuits. The new circuit, which is described in detail in the attached memorandum, provides an arrangement whereby the line signal ordinarily comes in only at the main answering jack.

The drawing is divided into three parts corresponding to three separate operators' positions, 1, 2, and 3 being the primary, secondary, and tertiary answering lamps respectively of a subscriber's line. When the subscriber removes his receiver from the hook his line relay operates, completing a circuit from ground at the line relay through wire 4, primary answering lamp 1, and relay 5; thence through break contact 6 of relay 7 to grounded battery 8, causing lamp 1 to light and relay 5 to operate.

The audible ringing signal is obtained by connecting microfarad condensers around the contacts of the ringing key on manual ringing cords or trunks, and around the contacts of the ringing relay on machine ringing cords or trunks.

<sup>2</sup> That is, wires 3 and 4.

When a ringing key or relay is operated the ringing current finds a path in parallel with the subscriber's line through the condenser and one winding of the repeating coil, which gives an audible signal to the calling subscriber. With individual and two-party jack-per-station lines a condenser is required in the ring side of the circuit only, but with two-party jack-per-line or four-party lines a condenser is required in the tip as well as the ring side of the circuit.

Yours truly, (282)

4

Mr. M. C. Allen,  
General Superintendent of Plant,  
New York City.

Dear Sir:

I have your letter of the 10th instant requesting a statement of my reasons for the recommendation contained in my letter of September 2, with which I gladly comply.

No. 2 Syracuse-Onondaga Valley circuit is a pair of straight 8's between Scranton and Onondaga Valley, and is usually simplex. This circuit has never given us any ringing trouble at Scranton, and if two Morse circuits should be required it could easily be composited and equipped with composite ringers.

No. 1 circuit, however, does not seem to offer such an easy solution. This circuit is composed of a side of a phantom on 3/4<sup>2</sup> Monterey-

Onondaga Line between Scranton and Union, and a pair of straight 12's between Union and Onondaga Valley. The Union test station is bridged on this circuit. Under these conditions we could obviate the difficulty heretofore encountered by putting a composite ringer between Scranton and Union, bridging the lineman's bell on the north side of the composite ringer. However, it would be a difficult matter to maintain apparatus of this kind at a station like Union. If arrangements could be made to remove Union, this circuit could be equipped with composite ringers at <sup>200</sup> both ends and satisfactory service would no doubt result. A possible way to handle Union would be to give the lineman a direct line to Binghamton and require the testboard men at Onondaga Valley and Scranton to reach Union through Binghamton.

Your suggestion as to the use of composite ringers on the Scranton-Elmira circuits seems on investigation to be entirely practicable. I therefore recommend that these circuits be handled in this way. Kindly inform me at your early convenience what action is to be taken so that I may arrange to have sufficient equipment at Scranton.

Yours truly, (299)

5

Mr. F. R. French,  
District Traffic Chief,  
Reading, Pa.

Dear Sir:

Some confusion has arisen regarding the use which may be made

of timing records taken by a service observer or timing operator. Misapprehension has also been found to exist regarding the function of the 15-second margin allowed after the expiration of three minutes in fixing the charge from the calculagraph reading.

In fixing the charge for messages the calculagraph records should be used in accordance with authorized instructions. The records made by the timing observer are to be used primarily for the purpose of securing greater accuracy in the work of the operators in timing messages by <sup>100</sup> the calculagraph, and should not be used for correcting the elapsed time shown by the calculagraph stamp unless the discrepancy between the two records is of such magnitude as to indicate a serious error in the calculagraph record. It is of course permissible to make use of the records of the timing observer in correcting such errors as a means of forestalling possible complaints from a patron in regard to charges.

It should be understood that the margin of fifteen seconds for the reading of the calculagraph stamp is allowed to cover the time required by the operators for properly <sup>200</sup> supervising the connection and stamping the ticket. Our rate for the initial period is based on a conversation of three minutes or less, and the margin of fifteen seconds is not to be allowed to the subscriber for conversation before charging for another minute. This interval is allowed to the company for doing the

necessary work at the end of | the conversation. The time allowance set to cover the work of supervision has been so fixed that the practice authorized | for charging from the calculagraph stamp should result in charging any fraction of a minute consumed in conversation above the | <sup>300</sup> three-minute limit as an additional minute.

Yours truly, (309)

6

Mr. W. P. Drake,  
Division Superintendent of  
Plant,  
Cleveland, Ohio.

Dear Sir:

The following is a description of the plan that we discussed recently in New York with reference to | handling certain of our lines in Eastern Ohio:

I refer to that part of the Cleveland-New Castle Line in | Trumbull County which is assigned to your division, and that part of the Charleston-Cleveland Line in Athens, Columbus, and | Washington Counties which is assigned to this division. In the former case, it is considered advisable that the Cleveland District | maintain the Cleveland-New Castle Line to the Pennsylvania-Ohio state line. In the latter case, it is suggested that | <sup>100</sup> the Pittsburgh District maintain the Charleston-Cleveland Line to Bradford.

The district plant chief at Cleveland will maintain the line | in Trumbull County as though it were one of the lines regularly assigned to

him. He will, however, charge all | of the expense regularly incurred on this line to the Pittsburgh District, Division No. 2, and make a monthly report | to the district plant chief at Pittsburgh for these expenses. As far as I can see, this will merely mean | an additional subdivision in the analysis of the blanket made up by the plant chief at Cleveland. By this method, | <sup>300</sup> the time spent by the linemen at Youngstown on lines in Trumbull County will naturally be charged up to the | Pittsburgh District. I would suggest that any unassigned time during the month be divided pro rata for their own information, | as I do not see how we can hold the district plant chiefs responsible for the condition of these lines | when they really have nothing to do with their maintenance.

I would be glad to have you signify your wishes | in this matter so that I can inform the plant chiefs concerned in this division as to how the maintenance | <sup>300</sup> of these two sections of lines is to be handled.

Yours truly, (312)

7

Mr. K. Y. Bigelow,  
General Superintendent of  
Traffic,  
New York City.

Dear Sir:

Several representatives of the Southern Bell Telephone & Telegraph Company, with whom I have talked about the sublicensee | de-

ment in their territory, have very plain their feeling (al- though they did not say so in so words) | that after once having sensed an independent company having connected it with our n their responsibility ends. I given to understand that there no plan on foot for educating class of office, and not much | of being able to do so; that tions in sublicense exchanges not likely to improve sufficiently arant trusting |<sup>100</sup> them to the business or to work out ly over our lines. Their present contemplates having the sube | office work through an A. T. or Southern Bell office, in- g in many cases a double haul our lines and delays in getting through. Frequently the office ating a message uses our lines to ie | "via" office what the rate is. n Virginia and West Virginia . 50% of the A. T. & T. | origi- g business is handled by A. T. & ices, and of the balance 40%, or t |<sup>200</sup> one-half, is handled by onsees. Because of the great pment of sublicense exchanges e Southern Bell territory, I | that unless some determined is made to educate them with a to ultimately having the larger ense | offices handle the serv- the manner prescribed for our ffices, it will necessitate many larities which impose a | drag e service and cause a wasteful lines.

Our rules and methods provide for handling the business | in the most efficient manner; unless these rules are extended as widely as pos- sible, a large percentage of our busi- ness |<sup>300</sup> will be handled in an ineffi- cient and expensive manner. As this whole question resolves itself into one of policy to | be pursued by the Southern Bell Company, I have not felt that I could go further than to emphatically state | my opinion whenever the matter was discussed. The purpose of this letter is to sug- gest that you take the matter | up with a representative of the associate company at some proper time.

Yours truly, (374)

8

Mr. F. E. Thomas,  
Chief Engineer, Western Elec-  
tric Co.,  
Madison Station, Chicago,  
Ill.

Dear Sir:

I have your letter of June 19 in which you request us to give you an operating description | of the circuit shown on our drawing #42-F-227.

I assume from your letter that | the method of receiving and making a call by means of the line keys and drops is clear to you. | As for the operation of the B keys, the D re- sistances, the #39-L relay, and the lamps, | these are used by the wire chief when he has received a call over an incoming trunk on the trunk |<sup>100</sup> switchboard and desires to have the call transferred to another



line. From the operating description given below, it will be seen that the wire chief may cut in on the trunk operator's telephone set and request a transfer to another line by merely depressing the B key. By the operation of the B key, the sleeve of the switchboard multiple line is opened so that the busy test relay in the incoming trunk circuit is allowed to fall back and place the busy test wire of the trunk operator's telephone set in direct connection with the tip of the line. <sup>200</sup> Starting with the ground on the busy test coil in the trunk operator's telephone set, the circuit passes through this coil to the tip of the line, via contact with the busy test relay of the incoming trunk circuit. The circuit then passes on down to the wire chief's telephone set by way of key A. From the opposite side of the wire chief's set the circuit continues on to key B, through outside contact, and through resistance D, where it terminates in ground. When the opposite side of the B key opens, the sleeve battery energizing the cutoff relay <sup>300</sup> is disconnected, but this battery is immediately replaced when the outside contact of the B key parts and supplies battery through resistance D.

The lamps shown on the drawing are used to indicate that the call is an incoming one, the lamps remaining operated as long as the calling operator has her cord in the

switchboard multiple jack. Should the wire chief throw his hold coil on the line, the lamps will continue to burn in order to keep him notified of the fact that the call may be finally disposed of. On a trunk connection originating with the wire chief the lamps will not burn.

Very truly yours, (408)

9

Mr. J. W. Wilton,  
General Manager, Central Pennsylvania Telephone Co  
Altoona, Pa.

Dear Sir:

I have your letter of August 1910 requesting certain information regarding #207 and #213 P.B.X.<sup>3</sup> board

The cord circuit on the #207 board has a relay in the sleeve circuit which operates when the sleeve of the calling cord is inserted in the trunk jack. When this relay operates, the P.B.X. battery is lifted from the particular cord circuit and a holding coil is placed across it, as to furnish supervision to the central office. The holding coil is wired through the night service battery and <sup>100</sup> can be removed only by operating this key. In the later type of #207 board, a night service is furnished with each cord circuit. On a trunk connection, the talking current is supplied to the station from the central office cord circuit. When the P.B.X. operator puts up a trunk connection in the regul-

<sup>3</sup> Private Branch Exchange

er, the station can signal only P.B.X. and not the central office. It is not intended that the sub-  
n shall be able to signal through the central office, but that it shall  
only the <sup>200</sup> P.B.X. operator, in turn can signal the central operator, if necessary, by re-  
ng and re-inserting the plug in trunk jack.

Only when the switchboard is un-  
ded and certain stations are  
ed through for "night serv-  
is it desirable that such sta-  
shall signal through to the  
al office operator. This is made  
ble by operating the "night  
at the P.B.X.

The standard trunk circuit of the  
3 board has condensers in  
; with both sides of the line so  
it is impossible for the battery  
the P.B.X. <sup>300</sup> to interfere  
the trunk line. For this reason  
parate set of "night service"  
k jacks is provided. These  
; are wired in the trunk circuit  
nd the condensers so that by  
ating the cutoff keys and  
; these special trunk jacks, sub-  
ons may be plugged through to  
central office when the switch-  
d is not attended, in the same  
ner as in the #207 type board.  
Your impression that only the  
7 type switchboards use re-  
ing coils is incorrect, as retarda-  
coils are used in both the #207  
and #213 type of boards.

Very truly yours, (410)

10

Hon. Albert S. Burleson,  
Postmaster General,  
Washington, D. C.

Dear Mr. Burleson:

I wish to inform you of the most recent practical result of the work of the technical staff of the Bell System. After several years of intense effort, they have invented and developed a practical system of multiplex telephony and telegraphy by the use of which it is now possible to increase manyfold the message-carrying capacity of long telephone and telegraph wires, especially of the open wire type.

An installation of the multiplex telephone system has been made between Baltimore and Pittsburgh and has been in service for more than a month. On Monday afternoon of <sup>100</sup> this week, accompanied by a party of distinguished government and telephone and telegraph officials, I made an inspection of this system at Baltimore and a test of the service provided by it between Baltimore and Pittsburgh. All were delighted with the successful working of the new system and the evident skill which had been shown in developing it.

With this new system four telephone conversations over one pair of wires may be carried on simultaneously, in addition to the telephone conversation provided by the ordinary methods. Thus, over a single pair of wires a total of five

telephone conversations may | <sup>200</sup> be simultaneously operated, each giving service as good as that provided by a circuit working in the ordinary way.

Heretofore | the best telephone methods known to the art provided only one telephone conversation at a time over a single pair | of wires. A number of years ago we developed the "phantom circuit" arrangement by which three telephone circuits are obtained | from two pairs of wires, an important improvement and one which is now extensively used. Now, by our new multiplex | method, we are enabled to obtain five telephone circuits over one pair of wires; that is, ten simultaneous conversations over | <sup>300</sup> the two pairs of wires which formerly could be used for only three. This represents an increase of more than | threefold in the telephonic capacity of the wires as compared with the best previous state of the art, and a | fivefold increase under conditions where the phantom circuit is not employed.

In telegraphy, as well as in telephony, sensational results | have been attained by the new system. By combining two telegraph wires into a metallic circuit of the type used | for telephone working and by applying our new apparatus and methods to this metallic circuit, we have enormously increased the | <sup>400</sup> capacity of the wires for telegraph messages. As applied to high speed printer systems we can do eight times as | much as is now done, and as

compared with the ordinary duplex telegraph circuit in general use we can do | ten times as much. These increased results are attained without in any way impairing the quality of the service.

From | the nature of the apparatus and methods employed the system is not practical on short lines, either telephone or telegraph. | On long lines its application will be extended immediately, but its introduction must necessarily be gradual on account of the | <sup>500</sup> nature of the apparatus required and the rearrangement and adaptation of the lines themselves and their associated apparatus to the | new methods of working. Our studies show, however, that this system of multiplex telephony and telegraphy will have great usefulness | on long open wire lines. It is not too much to characterize this new system as marking an epoch in | the development of long distance telephony and telegraphy.

Sincerely yours, (570)

11

Mr. F. E. Montague,  
General Traffic Superintendent,  
Southern Bell Telephone &  
Telegraph Company,  
Atlanta, Ga

Dear Sir:

I have looked into the arrangements for handling our business at several exchanges in the territory of the | sublicense companies in Virginia and West Virginia into whose exchanges our wires have recently

cut. I believe that a much efficiency can be obtained by giving to the letter our standard operating instructions.

This company has never felt the ownership of an office should be the controlling factor in the quality of service furnished subscribers or in the use made of the plant. Our object must always be to work toward operating and routing arrangements that will result of the highest possible degree of circuit efficiency consistent with the local plant. Such wasteful practices as may have existed when the connections to our lines at these points were made by toll stations should not be allowed to continue if the wires have been cut into a direct exchange. The economical use of toll lines all over the plant has become a serious problem.

Our principal objection to the present arrangement at these sub-center points is that they result in the unnecessary use of toll circuits in the first place to the detriment of proper rate and route determination, and secondly to the poor routing arrangements. Each check exchange should possess a copy of the Standard Route Book and Rate Book so that it will not be necessary to call a toll line to ascertain a rate, or to avoid passing a ticket to the originating office when there are two or more "via" offices. We have no difficulty in following this procedure even in offices where we have only a single employee, and at some points where we have only an agent.

With regard to the matter of routing, it appears that the present practice of these offices is to pass the business through some distributing office where all the ticket work and timing may be done, irrespective of whether or not such routing represents the best haul as regards facilities, transmission, circuit loads, etc. This again involves waste. In all ordinary cases the ticket record should be made at each check direct exchange and the timing done at the exchange to which the message is charged. In unusual cases if an office is unable to time a message to our satisfaction, it may be advisable to have the relay office do the timing and quote the elapsed time to the originating point after completion of the message.

This company does not of course deal directly with any sublicense office or any sublicense company on traffic matters, and must look to the licensee for the proper handling of the long distance business in its territory. Our traffic chiefs are now making systematic visits to each office in their respective territories, and we expect them to offer helpful advice concerning our rules and methods of operating. In this way new exchanges should develop quickly and attain an efficiency equal to other offices of a similar size.

This matter is important because of the fact that of the total originating A. T. & T. traffic in the Southern Bell territory in Virginia and West Virginia, excluding that handled by this company's operating

stations, nearly 40% | is handled by sublicensed companies.

I am forwarding a copy of this letter to District Traffic Chief Mc-Connell at | Richmond with the request that he hold himself in readiness to assist your traffic department at any time.

Yours truly, | (580)

12

mr a f hadley general superintendent of traffic new york city we submit the following narrative report of the traffic department division #2 from march 26 to april 25 the traffic handled in this division at offices operated by this company shows an increase of approximately 15% over the corresponding month of the previous year while this increase is encouraging the total traffic handled during the period at the six offices in the division selected for comparative purposes shows a decrease of 6% as compared with the previous month this decrease seemed to be general as all of the offices concerned reported practically the same percentage of decrease in traffic handled there were no serious delays to traffic in this division during the period covered by the report the associate company has postponed indefinitely the plan referred to in the narrative report for january for placing a loaded or repeatered circuit in service between dover and cape charles we have been unable to learn when this matter will be considered again the southern bell company completed the work of

changing the operating room at clarksburg w va and on april 17 cut over from the old building to the new office the cut-over was effected without interruption to the service the installation of cord circuit repeaters at the newtown square richmond and lynchburg offices has been completed by the plant department these offices are awaiting the receipt of instructions for the use of cord circuit repeaters it is expected that when these repeaters are placed in service considerable improvement in the transmission will be noted on calls routed through these offices over circuits suitable for the use of repeaters the plant department has completed the work of re-arranging the equipment in the richmond office in such a manner as to provide a common drop position this will greatly assist the richmond operating force in the handling of traffic during the night period and on sundays and holidays the service observing equipment at richmond has also been overhauled and that office will now be able to take observations without interfering with the operation of the multiple equipment on the switchboards sixty-two offices of the associated companies were visited by district traffic chiefs during the period covered by this report twenty-seven poor transmission reports were forwarded to the plant department for investigation reports on thirty-five poor transmission reports were received from the plant department during the period covered by this report yours very truly

## OFFICE TRAINING ASSIGNMENTS

In this section you are employed as stenographer to the District Plant Chief of the American Telephone & Telegraph Company at Richmond, Va.

## TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

## ARRANGEMENT

**Assignment 1.** Copy the style letter with carbon on form 43.

**Assignment 2.** Copy letter 9 with carbon on a letterhead.

## NARRATIVE REPORTS

In telephone offices reports in narrative form are regularly prepared and forwarded to superior offices. Two such reports follow.

## REPORT

## Use of Loaded Cables—Washington Division

This report is forwarded to comply with instructions contained in Engineering Circular # 8.

Between the Main central office and terminal pole # 11035, located on Brentwood Road north of Rhode Island Avenue, there are to be 25 pairs of cable # 54 loaded. These pairs are at present working unloaded through 10 and 13 gauge wire of that cable. They are to be loaded for the American Telephone & Telegraph Company to handle their New York-Washington Line, and are distributed as follows:

- 1 10 ga. pr. to Baltimore, Md.
- 3 13 ga. pr. " Baltimore, Md.
- 2 13 ga. pr. " Dallastown, Pa.
- 1 13 ga. pr. " Fredericksburg, Va.
- 1 10 ga. pr. " Harrisburg, Pa.
- 1 13 ga. pr. " Harrisburg, Pa.
- 1 10 ga. pr. " Lynchburg, Va.
- 5 13 ga. pr. " Newtown Square, Philadelphia, Pa.
- 1 10 ga. pr. " New York, N. Y.
- 2 10 ga. pr. " Pittsburgh, Pa.
- 1 13 ga. pr. " Brookland Test Sta. (wires known as 47 & 48).
- 4 13 ga. pr. " New York, N. Y.

Between the Main and West Exchanges and between the West Exchange and pole #3 on Wisconsin Avenue, via cables #43 and #210, there are nine pairs loaded. These pairs were also loaded for the A. T. & T. Company to carry the wires of the Norfolk-Washington line as follows:

- 1 to Fredericksburg
- 1 to Lynchburg
- 4 to Richmond
- 2 to Charlottesville
- 1 to Baltimore-Norfolk

Between the Main and West Exchange, via cable #43 and #210, there are 40 pairs loaded, 39 of which are working as follows:

- 3 to Bethesda
- 9 to Alexandria
- 4 to Falls Church
- 2 to Frederick
- 3 to Gaithersburg
- 1 to Hagerstown
- 3 to Rockville
- 4 between Toll and Cleveland
- 10 between Toll and West

Between Main and North, via cable #48, there are 40 loaded pairs, 31 of which are working as follows:

- 15 Toll to North
- 8 Toll to Columbia
- 8 to Kensington
- 3 to Sandy Springs

Between the Columbia Exchange and terminal pole at Military and Piney Branch Roads there are 15 pairs of cable #414 loaded, working as follows:

- 10 to Kensington
- 2 to Sandy Springs

Between Main and Lincoln, via cable #13, there are 16 pairs loaded working as follows:

- 6 to Marlboro
- 10 to Lincoln

Between the Lincoln Exchange and terminal pole on Good Hope road east of Nicholas Avenue, there are 5 pairs of cable #119 loaded working to Marlboro.

**Assignment 3.** Make a copy with carbon of the above report.

## REPORT

### SITUATION AT CAMDEN, N. J.

The Engineering Department has carefully considered the various rearrangements which might be made to take care of our lines east of the Camden Central Office, and has eliminated all but the following plans:

**First.** Acquire a duct from the Delaware & Atlantic Company from 21st and Federal Streets to the Camden Central Office, and lay therein a large gauge cable to carry the wires of the New York-Washington Line.

Acquire a duct from the Delaware & Atlantic Company from the Camden City Line and Haddon Avenue to the Camden Central Office, and run through it conductors to carry the circuits of the Camden-Atlantic City Line to the Camden Central Office.

**Second.** Build a 30 ft. pole line from pole No. 2789 of the New York-Washington Line, to pole No. 560 of the Camden-Atlantic City Line. Carry all Atlantic City circuits over this connecting line to pole No. 2789 of the New York-Washington Line. From this point divide Atlantic City circuits into two groups, and carry them direct to New York and Philadelphia respectively.

From 21st and Federal Streets to the Camden Central Office acquire a duct from the Delaware & Atlantic Company, and lay therein a 30 pair 13 gauge lead cable, made up for carrying phantom circuits.

In connection with proposition No. 2, it should be noted that the proposed connecting line between the New York-Washington and Camden-Atlantic City Lines can be built along country roads where there are few houses, and which are for the most part free from other pole lines. In general it is a very easy building proposition. Further than this the portion of the New York-Washington Line between poles Nos. 2789 and 942 will, without additional construction, carry all circuits of the Phila-



delphia-Atlantic City group, as well as all New York-Philadelphia circuit remaining after the New York-Atlantic City group has been taken care of. This is shown from the following data compiled from the traffic statistic contained in your letter of December 3, 1919, Subject: Camden Underground Situation.

PROBABLE ASSIGNMENT OF CIRCUITS—CAMDEN-ATLANTIC CITY LINE

|      | Toward New York |         | Toward Philadelphia |         |
|------|-----------------|---------|---------------------|---------|
|      | Physical        | Phantom | Physical            | Phantom |
| 1919 | 4               | 2       | 6                   | 2       |
| 1920 | 6               | 2       | 6                   | 2       |
| 1921 | 6               | 2       | 7                   | 2       |
| 1922 | 7               | 2       | 7                   | 2       |
| 1923 | 8               | 2       | 7                   | 2       |
| 1924 | 8               | 2       | 8                   | 2       |
| 1925 | 8               | 2       | 8                   | 2       |
| 1926 | 10              | 2       | 8                   | 3       |
| 1930 | 11              | 2       | 8                   | 4       |
| 1934 | 12              | 2       | 9                   | 5       |

Advantages of Proposition No. 1

- (a) The expense of the construction of a connecting line will be saved.
- (b) All wires to Atlantic City will be concentrated at the Camden Central Office, and can thus be used interchangeably.

Advantages of Proposition No. 2

- (a) If our circuits on the Camden-Atlantic City Line are carried through the local toll cable on Haddon Avenue to the Camden Central Office, it will be necessary in about two years to lay a second cable over this route. Without our circuits the second cable will not be needed for several years.
- (b) Atlantic City-New York circuits under proposition No. 2 will be open wire throughout, except for the terminal cables at New York and Atlantic City. Under proposition No. 1 four miles of cable would be in circuit through the City of Camden.

- (c) The cost of maintenance of the Camden-Atlantic City Line from poles Nos. 379 to 560 will be considerably lessened if our circuits are removed from the line, and the expense of maintenance to this Company for this portion of the line will cease entirely.
- (d) As our needs for circuits on the Camden-Atlantic City Line increase, the additional wires will be placed on the poles at a very considerable cost. At some points the feasibility of additional wires at any reasonable cost seems doubtful.
- (e) When it becomes necessary to take down the Camden-Atlantic City line west of the easterly limits of Haddonfield because of difficulty of maintenance or for any other reason, our circuits must be carried to Camden through a long length of cable, possibly over a circuitous route (via Haddon Heights).
- (f) Transmission on local toll service from Atlantic City to Trenton and to points reached via Trenton is now uncommercial. By means of the proposed connecting line and our other lines in the direction of Trenton a suitable route for a pair of local toll wires can be obtained.

Comparing the advantages of the two propositions, it would seem that the second plan is very much the better. It might be urged that proposition No. 1 could be followed until all spares in cable are exhausted, and then the connecting line could be built. The immediate gain of this compromise would really be the saving of annual charges amounting to \$2200 per year for about two years. It is possible, however, that the cost of constructing the connecting line would in two years be enough greater because of other occupancy of the road to offset the money saved. In addition to this, advantages (b) to (f) inclusive under proposition 2 would be sacrificed, either for the time being or permanently.

Relative to the portion of line between the Camden Central Office and the Delaware River, the Delaware & Atlantic Company will, as stated above, lay a one hundred pair lead cable over this section of the line. This cable, together with existing cables, will give them ample facilities for their circuits as well as our circuits between Philadelphia and Camden for some years to come. Of the circuits which they can turn over to us in this cable, at least 15 pairs would be 13 gauge. For this reason it seems to me a waste for us to attempt to lay our own cable in this portion of the city. Mr. Chase assured me that if we so desired it, a duct would be assigned to us from the Camden Central Office to the river. He is not prepared at this time to discuss the arrangement for taking over this duct.

Summing up the whole situation, I recommend that proposition No. 2 be adopted; that the Right of Way Department be requested to obtain the necessary rights for the connecting line; and that we be authorized to arrange with the Delaware & Atlantic Company to turn over for our use a duct from 21st and Federal Streets to the Camden Central Office. Arrangements for the construction of this duct for our use have already been made with the Delaware & Atlantic Company.

**Assignment 4.** Make a copy of this report with carbon.

#### PUNCTUATION AND PARAGRAPHING

Letter 12 is an example of a monthly narrative traffic report.

**Assignment 5.** Determine upon the punctuation and paragraphing and then write the report with two carbons.

#### TRANSCRIBING

**Assignment 6.** Transcribe the five letters which will be dictated to you. Present your work for signature.

#### FILING

Your correspondence in this section is to be filed numerically. The letters you have written come under the following numbers:

- 124—Richmond, Va.—Underground Circuit
- 29—Central Pennsylvania Telephone Co.
- 87—Western Electric Co.—Philadelphia
- 54—Burkeville, Va., Sub-license Exchange
- 72—Central Union Telephone Co.
- 64—Ball, Theodore H.
- 146—Richmond District—Consolidation Work

**Assignment 7.** Make out cards, prepare folders, and file your letters.

#### FOLLOW-UP LETTERS

We have a series of follow-up letters which we use to exploit the advantages of short period telephone service. Four letters of this series are given below. We keep a card index record showing the name of the firms to whom these letters are written and the dates on which they are sent, together with the dates on which replies are received.

**Assignment 8.** Make out cards for the Mansfield Mining Co., Richmond, Va., and the Eastern Car Wheel Co., Richmond, Va. From the fol-

lowing narratives prepare follow-up letters and enter the information on the cards:

Mansfield Mining Co. April 2, write them letter 1; April 15, letter 2; May 4, letter 3. On May 7 we receive a reply and on May 9 we write them letter 4.

Eastern Car Wheel Co. April 4 we write them letter 1; April 17, letter 2; May 6, letter 3. On May 9 we receive a reply and on May 11 we write them letter 4.

—1—

Gentlemen:

In the last issue of the New York Telephone Directory, we find that your company has an office in that city.

It occurs to us that you might find it advantageous to avail yourself of one of our short period contracts for daily telephone service to your New York office at an attractive special rate.

We should also like to call your attention to the enclosed schedule, showing the rates for different classes of service. Particulars of our short period telephone service will gladly be furnished upon request.

Very truly yours, (92)

—2—

Gentlemen:

We enclose a booklet entitled, "A New Way for the Business Man," which describes a new form of telephone service we are introducing which covers the leasing of our lines at reduced rates for private use for a period of time as short as half an hour daily if used before 10 A. M., between 12 M. and 1 P. M., or after 4 P. M.

Inasmuch as we have received no reply, we again take the liberty of addressing you with the hope that you will be good enough at this time to look into the matter.

We shall be pleased to have a representative call to see you to give in full detail any information you may care to have concerning this private line service.

Yours truly, (130)

—3—

Gentlemen:

Have you given adequate consideration to the advantages of private wire telephone service to your office in New York City? We are calling your attention to this matter again because we believe that a contract for a short period telephone circuit to New York would prove of value to you.

The wire we would furnish would be absolutely private and controlled by you. The rates to New York under contract are as low as \$1.50 a day for a

half hour's service daily. An attractive feature of our short period contract is that the service will be installed for a period of two months on trial.

If you desire further information or rates, we shall be glad to have a representative call upon you at your convenience.

Yours very truly, (133)

—4—

Gentlemen:

We are very glad to receive your letter of the — in which you request particulars regarding our short period telephone service.

The rate for one-half hour per day, either before 10 A. M. or after 4 P. M. is approximately \$52 per month; for a half hour every day between 12 M. and 1 P. M., approximately \$60 per month.

The contract provides for absolutely private wire service controlled and operated by the subscriber, and includes the installation of special long distance telephones in both your Richmond and New York offices. This means that at the stipulated time each day a private wire is connected to the two telephones which we install as stated above, and instead of placing the call as is your present method, you simply ring your New York office direct.

You will note that the rates quoted represent a very considerable reduction over the present tariff rates. A contract may be secured for as short a period as two months.

We enclose a contract blank which we trust you will fill out and return to us very soon.

Yours very truly, (192)

#### SECRETARIAL PRACTICE

The long distance telephone service affords one of the most indispensable aids to the conduct of business. Long distance, or "toll" calls as they are designated by the telephone company, are classified as "station to station" and "person to person" calls. A "station to station" call is one in which the calling party does not specify a particular person to be reached at the called telephone. The toll charge is applied in the event that the connection is established with the telephone called. A "person to person" call is one in which the calling party specifies a particular person to be reached at the called telephone, and the connection is established and the conversation held with that person. As this service requires a greater amount of operating effort, the charge for such calls is about one-fourth greater than the "station to station" charge.

In putting in a toll call, the secretary asks the local operator to give him "long distance." When the long distance operator answers he gives her the name of the company (if a "station to station" call) or that of the particular individual (if a "person to person" call) with whom his chief wishes to speak. He then

hangs up the receiver and when the operator has completed the connection she rings his telephone. The initial rate for toll service is based on a conversation of three minutes.

**Assignment 9.** Your chief: "I want to send out a little printed notice. Here are some notes embodying my ideas. I have a heading, you see; perhaps you can think of something better. This is quite important, but I haven't time for it myself. I'll be much interested in your production."

These are the chief's notes:

#### How You Can Help

Increased business activity cause of tremendous volume of traffic. Additional equipment to be provided as soon as possible.

1. Avoid use of L. D. lines except for urgent business.
2. Ready to talk when connection is established. Be brief so lines can be released for others.
3. Avoid tracing calls. Adds to operator's work without hastening completion of call.
4. Avoid "person to person" calls as far as possible. (Better not use this phrase, as some might not understand it.)
5. Have operator at your switchboard read this notice. Request her to cooperate in giving best possible service.

**Assignment 10.** Your chief: "I see we have a letter this morning from the Vulcan Products Co. in reply to one of our follow-ups. (See page 314.) They want us to quote rates between their office here in Richmond and one of their subsidiaries, the Sterling Co., in Philadelphia. Write them; and by the way, put a note on Jamison's desk to call on them just as soon as he can." The rates to Philadelphia, you find, are \$2.00 lower than those to New York. (Use letter 4, page 316, as a model for this letter.)

**Assignment 11.** Your chief: "You may make up our Monthly Service Roll Change Report today." (This is a report showing (1) the names and positions of new employees who began work during the month, (2) the names and positions of those who were dropped from the Roll, and (3) changes in salary.) The data, as handed to you by the Chief Clerk, is as follows:

New Employees—Herman Henderson, Lineman, Salary \$130; J. F. Fish, Lineman, \$140; Elizabeth Hayes, Stenographer, \$80; H. A. Clark, Clerk, \$125; Albert Russell, Messenger, \$40.

Employees dropped from Roll.—J. R. Garrison, Lineman, \$150; Mary A. Allen, Stenographer, \$100.

Salary changes—R. L. Fulton, Clerk, from \$125 to \$135; Ellen Abbott, Stenographer, from \$85 to \$90; J. R. Driscoll, Service Observer, from \$180 to \$190.

SHEPPARD, HAYDEN & SANDERS  
ATTORNEYS AND COUNSELORS AT LAW

410-416 LAW BUILDING  
DENVER, COLORADO

April 4, 1920.

Mr. T. W. Birmingham,  
Secretary, The City Gas & Power Co.,  
Colorado Springs, Colo.

Dear Sir:

Under another cover we are returning all papers in the matter of the claim of Henry W. Acker for free gas under the Remsen lease. We have concluded from our examination of this matter that free gas will have to be furnished to two dwelling houses. The lease specifically provides that the lessor shall have

"gas for his personal use in two dwelling houses on said premises so long as the lessee continues to use and operate said well or wells"

and further provides that

"all the terms and conditions hereof shall extend and apply to the heirs, successors, administrators, and assigns of the parties respectively."

There were two lessors; to wit, Paul Remsen and Nancy Remsen. The abstract shows a deed to the land made to them in 1896. It appears that William Remsen was an adopted son of Paul and Nancy Remsen. We understand that there were two dwelling houses on the property at the time the lease was made, one occupied by William and the other by his parents.

With this situation existing at the time the lease was made, the lessee covenanted to furnish free gas to William Remsen and Paul Remsen for their personal use in the two dwelling houses on the premises. You will observe that the language of the lease is that the gas is for the "personal

Mr. T. W. B. - 2

use" of the lessors. The land has since been conveyed and is now owned by Henry W. Acker and he is now the lessor or is in the same position as the lessor. Such a covenant as this is held by the courts to run with the land; that is, to inure to the benefit of each subsequent owner of the land even though no special provision to that effect is inserted. However, the parties did insert such a provision in this lease which we have quoted above.

It seems plain to us therefore that the present owner or owners of the land must be given free gas. The words "personal use" must mean something and we are inclined to think that the court would hold that the gas must be confined to the personal use of the land-owner in distinction to other uses such as for business purposes, manufacturing, etc.

Yours truly,

SHEPPARD, HAYDEN & SANDERS

per *W. G. Sheppard*

WGS\*RWJ



## LEGAL SECTION

### TECHNICAL TERMS

- acquittal**—the discharge of a party charged with a crime.
- adjournment**—the act of discontinuing the session of a court.
- adjudication**—a judgment or decision of the court.
- admissible**—capable of being considered as evidence.
- alienable**—capable of being sold or transferred to another
- allegation**—the assertion or statement of a party to a suit, which he undertakes to prove.
- ambiguity**—doubtfulness or uncertainty as to meaning.
- appeal**—the removal of a suit or cause from a lower to a higher court or tribunal in order that the latter may affirm or reverse the decision of the former.
- appellant**—one who appeals a case from a lower to a higher court.
- arraignment**—the act of calling and setting a prisoner before a court to answer an accusation.
- attestation**—signing as a witness.
- averment**—a statement of what the party to a suit professes to be ready to prove.
- bequeath**—to leave to by will. A *bequest* is something willed.
- brief**—a formal memorandum of the points of law or of fact to be developed or expanded in the argument before the court.
- caveat**—a notice filed in a public office to prevent some action being taken except after warning to the person who filed it.
- cestui que trust**—the beneficiary or person entitled to the benefit of a trust.
- chancery**—a court of equity.
- chattels**—articles of personal property.
- citation**—a summons; a notice to appear in court.
- codicil**—a writing by way of a supplement to a will and intended to be considered as a part of it.
- composition**—an agreement between a debtor and a creditor by which the latter accepts part of a debt due to him in satisfaction of the whole.
- contingency**—an event which may or may not occur.
- counsel**—a lawyer; also the lawyers associated in the management of a case.
- cross-examination**—an examination of a witness for one party by the opposite party or by his counsel.
- decree**—the decision of a court of equity.
- descendible**—capable of being bequeathed from an ancestor to a descendant, as from father to son.
- devisable**—capable of being bequeathed or assigned by will.
- escheat**—reversion of real property to the State from failure of legal heirs.
- indictment (in-dit' ment)**—statement of an offense as found by the grand jury.

- infringement**—a violation of a law or right; as, the infringement of a patent.
- injunction**—an order from a court requiring the person to whom it is directed to do or not to do a particular thing.
- in terrorem**—as a warning; by way of intimidation.
- inure**—to become available to or devolve upon as a right.
- irrelevant**—having no bearing on the question at issue.
- legatee**—one to whom a legacy is bequeathed.
- licensee**—one to whom a license is granted.
- litigious**—contentious; inclined to litigate or bring lawsuits.
- mandamus (man-dā'mus)**—a writing issued by a superior court directing some inferior court or person in authority to perform some specific duty.
- parol (pa-rol')**—given by word of mouth; oral.
- perjury**—the giving of false testimony under oath.
- petition**—a written application for an order from the court.
- prayer**—a petition or request to a court which specifies the thing desired to be done or granted as distinct from the recital of facts or reasons for the grant.
- probate**—official proof of a will.
- prosecution**—the party by whom legal proceedings are instituted.
- rebuttal**—the giving of evidence in a suit to destroy the effect of evidence introduced by the other side.
- remainder**—the balance of an estate depending upon a prior estate created at the same time and by the same instrument.
- replevin**—the term applied to an action to recover possession of goods wrongfully taken or withheld.
- replication**—the third step in a lawsuit, being the reply of the plaintiff to the defendant's plea or answer.
- residuary**—of or pertaining to that portion of an estate not specifically willed or bequeathed.
- respondent**—a defendant in a lawsuit.
- signatory**—one who is bound by his signature to the terms of an agreement.
- situate**—located; placed.
- subpoena**—a writ commanding the attendance in court of the person on whom it is served, under a penalty for default.
- tantamount**—equivalent to.
- tentative**—not settled; preliminary.
- testamentary**—relating to a will.
- testatrix**—a woman who makes a will.
- validity**—the state of being good or sound and capable of being successfully justified or defended.
- venue**—place of trial.

## CORRESPONDENCE

1

R. A. Milliken, Esq.,  
 Attorney at Law,  
 DuPont Building,  
 Wilmington, Del.

Dear Sir:

I shall be obliged if you will kindly prepare and file a replication to the answer of Carroll | Kline in the matter of the caveat to the will of the late Morris Kline, and follow this up with | the filing of a petition for the framing of the issues.

I promised Mr. Haynes to see to it that | the issues were framed and made ready for trial without delay, and I believe it is incumbent upon you to | make the next move. You might, if you will, let me have copies of your replication and petition for issues. | <sup>100</sup>

Very truly yours, (103)

2

Oscar Kenneth Jones, Esq.,  
 852 Federal Street,  
 Findlay, Ohio.

Dear Sir:

I have your letter in the matter of the Cummings suit. I feel more confident than you do | about the result for the reason that I am not relying upon any interest that Cummings may have under his | father's will, but am depending upon the remainder belonging to his children, some of whose interests are covered by the | assignment. Unless there are some cases in your state holding that such remainders are not assign-

able, I cannot see why | we should not ask a court of equity to have them sold for our benefit.

However, in case you think | <sup>100</sup> it better to leave Cummings himself out of the suit to be brought, even though he has other interests under | the will than those included in the spendthrift trust, it will be agreeable to me for you to do so. | I have no fear that the claim will not be paid if we can get Cummings' children into the position | of either paying the claim or losing their interest under the will.

Yours truly, (174)

3

C. R. Goodwin, Esq.,  
 Enid, Okla.

Dear Sir:

In re J. B. Wilkins Co.

Your letter of January 26 has been received. Proof of debt | has been duly filed with the referee. The bankrupt is endeavoring to effect a composition, offering twenty-five per cent. | cash. We have not made an investigation of the condition of the estate, and are not in a position to | advise you whether the offer is to your client's advantage.

The bankrupt's attorney informs us that he is doubtful whether | the composition will be effected in view of the fact that a majority of the creditors are opposing it. We | <sup>100</sup> have taken the matter up with several of the local counsel who represent creditors opposing the settle-

ment, and they inform | us that, considering the reputation of the bankrupt, they are advising their clients not to accept. All the assets have | been converted into cash, and if the bankrupt is offering more than the estate will pay, this would seem to | indicate that something is being concealed. If the offer is for less, then it should not be accepted.

Yours truly, | (180)

4

Mr. and Mrs. C. Walter Clark,  
Rural Route #2,  
Lutherville, Md.

Dear Sir and Madam:

I hereby notify you that my client, the Towson Building Supply Company, intends to claim a | lien, as provided by the Public General Laws of Maryland relating to the liens of mechanics and material men, against | all that two-story frame dwelling, situate in Baltimore County, in the State of Maryland, on one or the other | of the two lots of ground described in a deed from George C. Jones and wife to you, dated April | 29, 1916, and recorded among the Land Records of Baltimore County in Liber W.P.C.<sup>1</sup> #460, | <sup>100</sup> folio 351, of which said house and lots of ground upon which the same stands you are | the owners or reputed owners, for the sum of Four Hundred and fourteen dollars (\$414.00), for lumber and building materials furnished | by them within sixty days last past, for the construction of said building, to Ernest A. Gerwig,

the contractor for. | the building thereof, under an agreement made by the Towson Building Supply Company with the said Ernest A. Gerwig as | such contractor.

I append hereto a particular statement of my client's claim setting forth in detail the amount claimed by | <sup>200</sup> them to be due, the kind of materials furnished, and the dates when they were so furnished to the said | Ernest A. Gerwig, contractor as aforesaid.

Very truly yours, (229)

5

Charles W. Stone, Esq.,  
976 Parkman Ave.,  
Stillwater, Minn.

My dear Sir:

I am sending you the bill in the Chadwick suit, sworn to as you suggest. The reading | of it suggests to me the following question, as to which I shall of course be guided by your opinion: |

Does the wording in his father's will of the \$16,000 trust for Norman C. Addison, Jr., after the | life of the cestui que trust, vest the remainder absolutely and immediately in the four children of Norman C. Addison, | Jr., upon the death of the testator?

I do not see that the wording of this trust indicates an intention | <sup>100</sup> to give the remainder only to those of the four children who survive their father or to their issue. I | feel confident that by Minnesota law George H. Addison, one of the four

<sup>1</sup> "Liber" is the Latin for *book*. "W. P. C." are the initials of the Clerk of the Court.

children, would be held to be possessed of a vested remainder which would pass to his next of kin at his death.

From the "Memorandum of Authorities" you sent me some time ago, I understood that you considered that these remainders were vested subject only to open and let in children subsequently born. Do you now hold that they are contingent upon the Minnesota law? If not, is your allegation 6 on page 4 correct? Should not Joseph J. Addison's next of kin (who, I understand, by Michigan law are his father and mother) be named as the parties who become entitled to his share subject to the Stevenson assignment? Should the mother, therefore, be joined as a respondent, and should the prayer on page 6 include a demand that the interests of the father and mother as next of kin to Joseph J. Addison be sold also?

Yours respectfully, (283)

6

Mr. Alfred C. Marling,  
Pres., Tyrone Manufacturing Co.,  
Tyrone, Pa.

Dear Sir:

I have your letter of the 8th inst. regarding your contract with the Davidson Coal & Coke Company. In reviewing the correspondence on this subject it develops that you did not quote in your letter of November 4 the clause in the contract upon which the Davidson Company apparently bases its right to advance

the price, and not knowing that the contract contained such a clause I did not take very seriously their request for an advance of 95¢ per ton in price. The clause referred to is as follows:

"The within price for coke is based upon the present rate paid for mining. It is understood and agreed that any increase or decrease in said rate will be added to or deducted from the price herein named after due notice to purchaser."

This clause in such contracts is inserted to protect the mining company against increases in the cost of production due to advances in wages, which advances must be submitted to very frequently on account of the arbitrary conditions prevailing in the mining business, and because of the power of union labor. Such a provision is undoubtedly valid, and if there has been any wage increase in mining, the increased cost per ton due to such wage increase can be added to the contract price.

However, I doubt very much that there has been any wage increase which would add 95¢ per ton to the cost. You will note that the provision covers only increases in mining rates, that is, in wages paid to employes mining the coal; an increase in the wages of employes engaged in making coke could not be included. The inquiry contained in your letter of the 8th inst.

to the Davidson Company is therefore pertinent. You are <sup>300</sup> entitled to know what the wage increase has been and how it affects the price per ton.

Yours truly, (319)

7

H. Wiley Garrison, Esq.,  
864 Ward Building,  
Cincinnati, Ohio.

My dear Mr. Garrison:

I wish to call your attention to the agreement executed in behalf of my client by Mr. Earl English and his family, the original of which, as well as copies of other papers executed at the time, you borrowed from me the morning after they were drawn up.

After urgent and repeated solicitations on your part and frequent interviews with Mr. English, I succeeded in bringing him to your office, where there was set on foot a negotiation resulting in the execution of these papers. Insofar as<sup>2</sup> I recollect, they contemplated the institution of an equity <sup>100</sup> proceeding based upon your judgment in the Common Pleas,<sup>3</sup> and they were tantamount to a confession of judgment by the entering of a decree, the amount of which I remember was to include my client's claim of \$950.

Some time elapsed between the time of the execution of these papers and the death of Mrs. English, Sr., and I remember saying to you frequently that if you did not proceed

with greater diligence that event might happen. I do not now recollect the contents of those papers sufficiently to say whether this contingency was provided for therein, <sup>200</sup> but there can be no doubt from the frequent statements of Mr. English to me—the last only a short time ago in my office—that there was not and is not now the slightest doubt as to the intention of the signatories to protect and provide for my client under any and all circumstances. Even without formal equity proceedings, or a decree in such a proceeding, it appears to me that the papers may fairly be made the basis for a re-assessment of the damages, in accordance with the action then contemplated.

I trust you will now give <sup>300</sup> this matter your careful attention. You can readily understand that in justice to me there cannot be a satisfaction of judgment unless my client is paid as provided by the agreement.

Yours very truly, (334)

8

Mr. W. C. Sterrett,  
Pres., The Texas Oil Refining Co.,  
Dallas, Texas.

Dear Sir:

In the matter of the proposed redemption of the bonds of the Texas Products Company, we are preparing the notices and taking the necessary steps to arrange for redemption

<sup>2</sup> This phrase, like *inasmuch as*, is properly written as two words.

<sup>3</sup> The name applied in some states to a county court

on February 1, 1920. As already explained to you, this redemption necessitates the deposit with the trustee of \$100,000 on or about January 1, 1920, because in order to redeem on February 1, four weeks' notice must be given to bondholders by the trustee, and the mortgage provides that before the notice shall be given the money to redeem the bonds must be on deposit with the trustee.

Under the contract the Texas Oil Refining Company is to furnish the principal sum and accrued interest, and the Texas Products Company is to furnish the premium of two and one-half per centum, to effect the redemption. The contract provides that your company shall pay this \$100,000 and accrued interest on or before February 1, and you have assumed that you would be discharging your obligation if it is paid on that date. In view of the position you have taken, we have stated to you that inasmuch as we are also eager to have the bonds redeemed, we will, if necessary, furnish the money ourselves and have made tentative arrangements to do so. We wish again, however, to suggest that you should furnish this money, and that we do not concede your contention that the contract does not require you to furnish it on January 1.

The contract contemplates very plainly that the bonds shall be redeemed by moneys furnished by you and that they shall be redeemed on

February 1. They cannot be redeemed on that date unless the money is available for deposit with the trustee on January 1. The language of the contract, which requires payment by you "on or before February 1" seems to us to mean that you must furnish it on January 1 in view of the requirements as to four weeks' notice and deposit with the trustee stated above.

Yours truly, (347)

9

The Mitchell Motor Mfg. Co.,  
St. Louis, Mo.  
Gentlemen:

In preparing our brief in the Nolton case, it is necessary for us to have full information with regard to the various patents owned by your company, the extent of such patents in view of prior patents issued in connection with the art of gasoline engine manufacturing, and such infringing devices as have come to your notice. We therefore ask you to send us the following:

1. The patent allowed on the Mitchell application, Serial Number 234,785, Docket Number 1435. This patent covers the jacketed cylinder, sleeve, etc.

2. All papers in your possession relating to the above patent. We have nothing in our files which relates to this patent except a letter from Mr. Felton, dated June 14, 1918, in which he states that the application had been allowed and that the patent would be granted upon the payment of the final govern-

ment fee of \$20.00. We particularly desire | Mr. Felton's briefs that were filed with the application for this patent, together with copies of your correspondence with him | in relation thereto.

3. Any information which you may have in regard to infringements on this patent. If you have | <sup>200</sup> any drawings or photographs of alleged infringing devices, kindly send them to us with notations indicating the exact nature of | the infringements. The mere interposition of a screen in the by-pass, or of a series of screens, does not | infringe the Jenkins patent; so you need not send us any papers referring to such a device.

The original patent | papers covering the Jenkins patent for improvements in multiple stage air and gas compressors are in our possession, but we | do not know whether this patent is of any real commercial value, whether the device was used in machines manufactured | <sup>200</sup> by the predecessor of your company, or whether it is being infringed by other companies. Kindly inform us as to | this.

Yours very truly, (424)

10

The American Locomotive Company,  
Schenectady, N. Y.

Gentlemen:

Your letter of the 8th inst. relative to the method of handling accidents resulting in injuries to employees of | the Consolidated Gas Electric Light & Power Company of Baltimore has been referred to me.

Since November 1, 1914, | there has been in force in the State of Maryland a Workmen's Compensation Act, which provides for compulsory insurance against | accidents to or the death of workmen engaged in extra hazardous employments, and abolishes the defenses of Assumption of Risk, | Contributory Negligence, and Negligence of Fellow-Servant. Under the terms of the act, employers engaged in extra hazardous employments are | <sup>100</sup> compelled to insure their employees against accident or death by one of the following three methods:

1. By insurance in | the State Accident Fund.
2. By insurance in an authorized insurance company.
3. Self-Insurance, by furnishing proof to the | Insurance Commission of financial ability to pay compensation.

When an employee is injured as a result of an accident, he | is entitled to compensation regardless of the manner in which the accident occurred, unless the injury was caused while the | employee was in an intoxicated condition, was contributed to by his own wilful misconduct, or was intentionally inflicted. No compensation | <sup>200</sup> is allowed during the first two weeks of disability. Beginning with the fifteenth day the employee is entitled to compensation | at the rate of one-half of his average weekly wages during the continuance of the remainder of his dis-



ability, | with a minimum allowance of \$5.00 and a maximum allowance of \$12.00 per week. Our company is a | self-insurer and handles through its Legal Department all of the accidents resulting in injury to employees.

When one of | our employees is injured he is given first aid and sent immediately to the company's Medical Department, which is in | <sup>300</sup> charge of our own physician. If the case is a serious one, the patient is taken to one of the | local hospitals. We have made arrangements with practically all of the hospitals for one surgeon to handle our cases. We | allow a man his full salary from the time of the accident until the date of his recovery, unless our | investigation discloses some unusual circumstances which make it advisable to abide by the strict letter of the law. Accidents are | reported through our Legal Department to the State Industrial Accident Commission and an award made, whereupon a final settlement receipt | <sup>400</sup> is obtained from the employee and filed with the commission. No distinction is made between salaried men and day laborers | insofar as handling accident cases is concerned, both classes of men receiving their full remuneration as above stated.

Yours very | truly, (441)

11

Albert Summers, Esq.,  
400 Wheeler Bldg.,  
Denver, Colo.

Dear Sir:

I have made a careful examination of the brief you sent me and I

am now ready to | give you instructions for proceeding with the Mason matter. Before doing so, however, I want to call your attention to | the following points:

I think it may be conceded, as your brief holds, that as far as Mason's joining in | the assignment to Mrs. Winter was concerned it was inoperative to transfer any portion of the income of the fund | reserved for his benefit; but you will observe by examining the will that he had other interests in his father's | <sup>100</sup> estate in addition to his interests as beneficiary under the spendthrift trust. He had, for instance, an interest under the | will and codicils in the silverware and personal effects belonging to his father after the death of the life tenant. | He had also a contingent interest in the remainder of the fund given in trust for Harry C. Mason, in | case of his (Harry's) death without issue. He also had a contingent interest in the remainder of the fund of | three-fifths of the residuary estate given by the testator in trust for his two daughters and his granddaughter, | <sup>200</sup> in case of the death of any of them without issue. Some of these contingent interests may already have become | vested by the deaths of some of these parties. He would also have an interest as one of the heirs | at law of his father in any portions of the residuary estate the bequests of which may lapse.

The assignment | to Mrs. Winter expressly covered his interest as heir at law as well as his interest as legatee under the | will. It seems to

me that while we cannot touch the income of the spendthrift trust, we can certainly acquire | <sup>800</sup> whatever other interests under the will there may be that are now vested in Mr. Mason.

As to the interest | of those of Mr. Mason's children who joined with him in the assignment to Mrs. Winter, under the New York | law they would have a vested remainder in the trust fund for their father and this remainder would be alienable, | devisable, or descendible and could be reached without difficulty by their creditors. Unless the law is different in Colorado, this | must hold true also in that state, and I understand from your brief that you consider that such is the | <sup>400</sup> case. In addition to this vested remainder they have the same contingent interests in the other properties given by the | will that their father has, in case their father should die before the happening of the contingencies.

I am confident | that the assignment has actually pledged to Mrs. Winter valuable interests under the Mason will and that these can be | reached. I want you to proceed at once in whatever manner you deem proper. I understand that you consider it | merely necessary to bring a bill in equity setting up the indebtedness and the default. I should have thought that | <sup>600</sup> it would be necessary to get a judgment against Mr. Mason in the first place and exhaust the remedies against | him by having the execution returned before

proceeding under the assignment. If you think this is not necessary and that | the assignment is to be considered simply as a pledge of collateral, I shall abide by your judgment in the | matter.

Yours respectfully, (563)

12

on june 22 1917 the united states circuit court of appeals for the second district handed down a unanimous decision in the case of the klosfit garment company versus the oswald tailoring company which sustains the validity of the klosfit patent on the jersey top skirt with an elastic waist band and a non-elastic flounce this decision eliminates the numerous defenses which have been raised and finally disposes of the case as there is no further appeal under this adjudication our clients and their licensees have the sole and exclusive right to manufacture and sell a jersey top skirt with an elastic waist band and a non-elastic bottom portion as counsel for the plaintiffs we notify you that if you have in stock any jersey top petticoats with an elastic waist band and a non-elastic bottom portion i e messaline taffeta or cotton flounce which infringe upon the said patent the sale of the same must be discontinued and the petticoats returned to the makers at once our clients propose to enforce their rights to the full extent of the law and will hold retailers responsible for selling the infringing petticoats moreover in view of the repeated decisions sustaining the patent and

the publicity which has been given to them our clients will insist upon the full measure of the law which gives them the right not only to an injunction and an assessment of costs and damages but also the right to have the damages trebled where the infringement is wilful all petticoats

made by the klosfit garment company or their licensees bear the trademark klosfit on the labels on each waist band we request your prompt attention to this notice and the immediate discontinuance of the sale of infringing garments if you have any in stock yours very truly

### OFFICE TRAINING ASSIGNMENTS

You are employed in the law office of Sheppard, Hayden & Sanders, Attorneys at Law, Denver, Colorado. Your teacher is a lawyer employed by them.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

Follow the form of the style letter in all correspondence in this section, single spacing or double spacing the letters as your judgment dictates. Always sign the firm name, per ———, as shown in the style letter.

**Assignment 1.** Copy the style letter with carbon on form 44 and hand it in.

#### TESTIMONY

Mr. Sanders wants you to make a copy for Mr. Sheppard of the following testimony taken in a case we are now trying. Testimony is written in two ways. In some cases the answer is begun on the same line with the question, as shown in the testimony below. In other cases both questions and answers begin at the margin as shown on page 337.

#### Testimony

Captain Hubbard, after being duly sworn on behalf of the Defendant, testified as follows:

#### DIRECT EXAMINATION BY MR. SANDERS

Q. Where do you reside? A. 448 N. Sycamore Street, Ashtabula, Ohio.

Q. What is your occupation? A. Master of steamers.

Q. How long have you followed that occupation? A. About twenty years.

Q. All on the Great Lakes and rivers? A. Yes, sir.

Q. How old are you? A. Thirty-six.

Q. And since you were sixteen years old you have sailed the Lakes?  
A. Yes, sir.

Q. How long have you had master's papers? A. I think about seven years

Q. That you have had papers? A. Yes, sir, master's license.

Q. How long have you been master of a vessel? A. Five seasons and a half.

Q. Just tell me the boat you have been on as master. A. On the Steamer North Star all the time.

Q. And what kind of a boat is the North Star? A. She is a canal size boat, single deck boat.

Q. How long is she? A. I believe her dimensions are 241 feet keel and 41 feet beam, and I believe 255 feet over all.

Q. And her molded depth? A. Well, I couldn't say exactly; about 16 or 18 feet I should judge.

Q. Where did the North Star put up last winter? Where was the North Star? A. In Milwaukee.

Q. You took her out on the first trip last year? A. Yes, sir.

Q. What time did you leave Milwaukee? A. April 22 at 10.45 p.m.

Q. Loaded with what? A. Light.

Q. For where? A. Duluth.

Q. When did you reach Duluth? A. April 26 at 7 A.M.

Q. Did you get a load at Duluth? A. Yes, sir, between Duluth and Superior; I loaded at both places.

Q. With what? A. Fifty thousand bushels of wheat and 29,000 bushels of barley.

Q. Making a total tonnage of how much? A. I forget the record of the tonnage.

Q. When did you get loaded? A. We got loaded on April 27, about ten o'clock in the evening.

Q. At what dock were you when you were loading? A. We finished loading at the Great Northern Elevator at Superior.

Q. When did you leave the dock? A. We left the dock about 11 P.M.

Q. Which entrance to the harbor did you leave by? A. Duluth.

Q. What time did you pass the light on the piers at Duluth? A. April 27, about 11.45 P.M.

Q. What was the wind and weather at that time? A. The wind was northeast.

Q. How about the weather? A. Well, there was quite a bad gale blowing when we left.

Q. How much of a wind? A. Well, I couldn't say just exactly the velocity of the wind.

Q. Give me some idea. A. I should judge it was in the neighborhood of 25 or 30 miles an hour.

Q. How was the sea at that time? A. There was quite a big sea.

Q. Can you give me any more definite idea about that? A. It was what I would consider quite a heavy sea running when we left.

Q. How long had the wind been fresh and from the northeast? A. I couldn't say. I don't remember. I didn't take notes.

Q. What course did you take when you left the pier? A. I shaped my course to go down the north shore.

Q. Can you tell me about what that course would be? A. (referring to the chart) It would be just about on that course that I left.

**Assignment 2.** Make a copy of this testimony with carbon.

ANSWER

We have prepared the following Answer to the plaintiff's **Bill of Complaint** in the case of **Krueger vs. Talbut**. We represent the defendant.

STATE OF COLORADO, )  
 COUNTY OF DENVER. ) ss.

William F. Krueger, )  
 Plaintiff, )

vs. )

Walter Talbut, )  
 Defendant. )

IN DISTRICT COURT  
 FIRST JUDICIAL DISTRICT

ANSWER

Defendant above named, for answer to plaintiff's complaint herein,

I

Denies each and every allegation, matter, and thing in said complaint contained, except as hereinafter admitted, qualified, or explained

II

Admits that he is in possession of the premises in said complaint described, and that he withholds the same from plaintiff.

## III

Denies that plaintiff is the owner of the same or of any part thereof, and denies that plaintiff is entitled to the possession of the same or of any part thereof.

## IV

Defendant alleges that he is the owner of the premises in said complaint described and of the whole thereof, and that he is entitled to the possession of the same and of the whole thereof; that on or about the fourth (4th) day of October, 1898, he established a residence upon the Northeast one-fourth (N. E. 1/4) of Northeast one-fourth (N. E. 1/4) of said Section 15 and erected substantial improvements thereon; that at all times since said fourth (4th) day of October, 1898, defendant has been in possession of said premises, claiming title thereto under the Laws of the United States.

## V

Defendant alleges that he has been in actual, open, notorious, adverse, and uninterrupted possession of the whole of the premises described in plaintiff's complaint, as owner, for more than twenty years immediately preceding the commencement of this action; that during the whole of said period he has protected a portion of said premises by a substantial enclosure and during the same time has used, cultivated, and improved the whole of said tract in the usual manner of husbandry.

## VI

Defendant alleges that he is entitled to Northeast one-fourth (N. E. 1/4) of Northeast one-fourth (N. E. 1/4) of said Section Fifteen (Sec. 15) under the land laws of the United States, and that proceedings to acquire legal title thereto are now pending in the Executive Department of the United States Government.

## VII

Defendant denies that he has used force, menaces, or threats or any unlawful means whatever to retain possession of said premises.

## VIII

For a further defense defendant alleges upon information and belief that the pretended conveyance under which plaintiff claims was executed and delivered by plaintiff's grantor and by plaintiff accepted while said

premises were in the actual possession and occupation of this defendant, who claims under a title adverse to that of plaintiff's said grantor, and that said conveyance is therefore void.

## IX

Defendant by way of counter claim alleges that he has, while in possession of said premises and while holding the same under color and claim of title adversely to the claim of plaintiff, in good faith, erected valuable improvements thereon, consisting of: granary 16 x 22 feet; horse stable 16 x 24 feet; cow stable 16 x 30 feet; wheat granary 16 x 30 feet; dwelling house 18 x 25 feet; machine shed 18 x 36 feet; work-house 14 x 16 feet; chicken house 10 x 12 feet; well with iron pump; and fences.

That said improvements are reasonably worth the sum of Seventy Eight Hundred (\$7800.00) Dollars.

That the said land, exclusive of said improvements, is reasonably worth the sum of Twenty Nine Hundred (\$2900.00) Dollars.

## X

Defendant denies that plaintiff has been damaged in the sum of three hundred (\$300) dollars by reason of the withholding of said premises by defendant or that by reason thereof plaintiff has been damaged in any sum or sums whatever.

WHEREFORE defendant prays judgment that this action be dismissed and for his costs and disbursements herein.

---

Attorneys for Defendant, Denver, Colo.

State of Colorado )  
County of Denver ) ss.

Walter Talbut, being first duly sworn, deposes and says that he is the defendant in the action in the foregoing answer, that he has read said answer and knows the contents thereof and that the same is true to his own knowledge, except as to those matters therein stated on information and belief, and as to those matters, he believes it to be true.

---

Subscribed and sworn to before me  
this 11th day of February, 1919.

---

Notary Public, Denver County, Colo.

**Assignment 3.** Make a copy of this Answer in duplicate.

REPLY

The following is a Reply we have just prepared for our clients, Boyd & Edgren, to the Answer and Counter Claim of the defendant in their case against J. F. Donaldson.

STATE OF COLORADO ) IN COMMON PLEAS COURT NO. 1  
COUNTY OF DENVER ) ss.

Boyd & Edgren, )  
Plaintiff, )

vs. ) REPLY

J. F. Donaldson, )  
Defendant. )

I. The plaintiff replies to the Counter Claim contained in the Answer of the defendant: That as to the truth of each and every allegation of said Counter Claim, except the last one, which sets forth the defendant's estimate of the value of the land set forth in plaintiff's Complaint, plaintiff alleges that he has no knowledge or information sufficient to form a belief and therefore denies the same, and each and all thereof.

II. Plaintiff alleges that the reasonable value of the land described in plaintiff's said Complaint, exclusive of the improvements described in said Counter Claim, is Sixteen Hundred (\$1600.00) Dollars.

WHEREFORE plaintiff demands judgment against defendant, as set forth in his said Complaint.

---

Dated February 9, 1919. Attorneys for Plaintiff, Denver, Colo.

**Assignment 4.** Make a copy of this Reply with two carbons.

DEMURRER

We have prepared this Demurrer to the plaintiff's Complaint for our clients, The Denver & Rio Grande Railway Company.

SUPREME COURT  
STATE OF COLORADO

Allan C. Rider, )  
Plaintiff, )

vs. ) DEMURRER

Denver & Rio Grande Railway Co. )  
A Corporation, )  
Defendant. )

Defendant above named demurs to plaintiff's complaint herein.



## I

For the reason that it appears from the face of said complaint that the Court has not jurisdiction of the action.

## II

For the reason that the complaint does not state facts sufficient to constitute a cause of action.

WHEREFORE defendant prays judgment that this action be dismissed and for his costs and disbursements herein.

---

Attorneys for Defendant, Denver, Colo.

Dated February 8, 1919.

**Assignment 5.** Make a copy of the Demurrer in duplicate.

## WILL

Mr. Hayden has drawn up the following will for one of our clients.

## Last Will and Testament

I, Alice Margaret Wright, of the City and County of Denver, State of Colorado, being of sound mind and memory, do make, publish, and declare this my LAST WILL AND TESTAMENT, in manner and form following:

First. I direct that all my just debts and funeral expenses be paid as soon after my decease as conveniently may be done.

Second. I give and bequeath to my sister, Katherine Seeger, seven thousand dollars (\$7000.00).

Third. I give, devise, and bequeath to my mother, Ruth Elizabeth Seeger, my farm and homestead situated one mile east of Elsmere, County of El Paso, and State of Colorado, known as "Sunset Farm," for and during the term of her natural life, and after her death, to my sister Katherine Seeger, her heirs and assigns forever.

Fourth. I give, devise, and bequeath to my husband, John Henry Wright, all the rest, residue, and remainder of my estates, both real and personal, in lieu of his estate by curtesy, to have and to hold the same to himself and his heirs or assigns forever.

Fifth. I hereby appoint Walter G. Sheppard, Attorney at Law, of Denver, Colorado, executor of this my LAST WILL AND TESTAMENT,

revoking all former wills and testamentary instruments of every kind by me made.

Sixth. The above provisions of this my **LAST WILL AND TESTAMENT** were each and all at my certain request and direction drafted by Everett C. Hayden, Attorney at Law, Number 410 Law Building, Denver, Colorado.

IN WITNESS WHEREOF, I have hereunto subscribed my name and set my seal, this the Tenth day of February, in the year of our Lord one thousand nine hundred and nineteen.

Signed: \_\_\_\_\_ (SEAL)

**ATTESTATION:** We whose names are hereto subscribed do **CERTIFY THAT** on this Tenth day of February in the year of our Lord one thousand nine hundred and nineteen, in the City of Denver, Colorado, the above named testatrix, Alice Margaret Wright, subscribed the foregoing instrument in our presence and in the presence of each of us, and at the same time she declared the instrument to be her **LAST WILL AND TESTAMENT**, and we, at her request and in her presence and in the presence of each other, have signed our names hereto as attesting witnesses. And we further certify that at the time of subscribing the instrument the said testatrix was of sound and disposing mind and memory.

Signed:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Assignment 6.** Write this will in duplicate.

#### TESTIMONY

The following testimony was taken yesterday afternoon in a case being tried by Mr. Sheppard.

#### TESTIMONY

##### AFTERNOON SESSION (1.30 P.M.)

**CHARLES H. RICHARDSON**, recalled for further Direct Examination, testified as follows:

**BY MR. KENYON:**

**Q** You had some arrangement with Mr. Lind, did you, in reference to the sale of his lot?

A Yes, sir.

Q Was it in writing, any arrangement you had with him?

A Not at that time.

Q Well, state what arrangements you had with Lind in reference to the sale of this lot.

MR. SHEPPARD: I object to that as immaterial; unless it is in writing, it is incompetent under the statute of frauds.

THE COURT: I think there is a new statute of 1915.

MR. SHEPPARD: 1913, your Honor.

THE COURT: 1913?

MR. SHEPPARD: 1913, yes.

THE COURT: They do not have it here of course. But that is the way I understand it.

MR. MILLIGAN: I think there is a distinction, your Honor. The defendant in this case is not D. W. Lind. We are not suing Mr. Lind for any commission on the sale of real estate. Now, that statute was, as I understand it, put in effect to protect defendants. I don't think it has anything to do with reference to a case of this kind. We will show your Honor by a writing later on that somebody else assumed and agreed in writing to undertake the obligations assumed by Mr. Lind verbally, and that is what we desire to show here. I think, your Honor, we have a right to do that irrespective of the statute. If Mr. Lind were being sued here for a commission on the sale of the real estate, counsel certainly would be entitled to raise this objection, but Mr. Lind is not being sued. We want to show—

THE COURT: How do you claim that you have a claim against the defendant in this case?

MR. MILLIGAN: I want to show your Honor by this witness that he had a verbal agreement with Mr. Lind in reference to the payment of the commission, but that the agreement was later assumed and adopted by Mr. Oliver in writing, which writing I will produce when I put Mr. Lind on the stand.

THE COURT: Well, without that statute (of course, I haven't it here) I think the better way is for you to go on and make your showing, and of course the court will have to direct a verdict in any case. So proceed.

MR. SHEPPARD: Of course, this oral testimony is taken subject to objection.

THE COURT: Oh, yes, certainly.

MR. SHEPPARD: I object to it. That is all that is necessary.

Q Now, what agreement did you have with Mr. Lind?

A Mr. Lind told me—

MR. SHEPPARD: Now, I object to that for the further reason it was not made in the presence of Mr. Oliver, and Mr. Oliver would not be bound by any such arrangement.

THE COURT: Is there any writing? Counsel has said he has a writing which shows the agreement was assumed by Oliver.

MR. SHEPPARD: Now, it is going to help the court out a lot—

MR. MILLIGAN: I think we will get that, your Honor.

MR. SHEPPARD: I think this will help you in passing on objections. (Handing paper to the court.)

**Assignment 7.** Make a copy of this testimony for Mr. Hayden.

#### BY-LAWS

The by-laws which follow have been drafted by us for the Colorado Gold Mining Company of this city, which is now being organized.

#### BY-LAWS

#### THE COLORADO GOLD MINING COMPANY

##### Article I

##### Home Office

The Home Office of the Colorado Gold Mining Company shall be in the City of Denver, State of Colorado, and shall be kept open for the transfer of stock and the transaction of other business, every day of the year except Sundays and legal holidays, unless otherwise ordered by resolution of the Board of Directors for good cause. The business hours shall be from 9 A.M. to 5 P.M. on business days.

##### Article II

##### Stated Meetings

The stated meetings of the Board of Directors shall be held on the Tuesday after the first Monday of every calendar month, except when the Tuesday so designated shall be a legal holiday, when the meeting shall be

held on the next succeeding business day, at the designated place and hour. The place of meeting shall be the Home Office in the City of Denver, Colorado, and the hour for such meeting shall be 10 A.M.

### Article III

#### Elections

All elections shall be by ballot, unless by unanimous consent when the vote may be taken *viva voce*.

### Article IV

#### Officers

The Board of Directors shall elect a President, a Vice-President, a Secretary, a Treasurer, and such other officers as may be necessary. The election of such officers shall be at the first meeting after the annual election of directors, or as soon thereafter as may be practicable. They shall hold their respective offices at the pleasure of the Board of Directors.

### Article V

#### The President

The President shall preside at all meetings of the Board of Directors and be a member of such board. He shall appoint all committees not otherwise ordered by the Board of Directors, and shall be a member of such committees *ex officio*. He shall attend to the executive business, and have charge of the general welfare of the Company, under the direction and control of the Board of Directors. The Vice-President shall perform the duties of the President in the absence of the regularly elected President.

### Article VI

#### The Secretary

The Secretary shall keep a regular record of the proceedings of the Board of Directors; give notice to the directors of all stated or special meetings; attend the meetings of all committees, when required to do so; have the custody of the seal of the corporation; conduct the correspondence and keep the books of the Company; and attend to such other proper duties as the President or the Board of Directors may from time to time require. He shall give such notice as is required by law of the annual and special meetings of the stockholders.

## Article VII

### The Treasurer

In order to qualify for the duties of his office, the Treasurer shall give a bond, from an approved fidelity and trust company, in such sum as the Board of Directors may from time to time require, such bond to be in the nature of security for the faithful performance of his duties. He shall keep a separate account in the name of the Company in such bank or banks as the Board of Directors may from time to time designate, and the funds deposited thereon shall be subject to drafts or checks, signed by the President and countersigned by the Treasurer. He shall make a detailed report of the receipts and disbursements of the business at the stated meetings of the Board of Directors, and at the annual meeting in January of each year he shall present a complete statement of his accounts for the year ending on the thirty-first day of December previous. His books shall at all times be open to the inspection of the President and Board of Directors, or any member thereof. All payments shall be made by orders drawn on the Treasurer, under appropriations granted by the Board of Directors, signed by the President, and countersigned by the Secretary.

## Article VIII

### Committees

The standing committees, to be appointed annually on or before the first stated meeting of the Board of Directors, shall be a Finance Committee, and an Executive Committee: (1) The Finance Committee shall consist of three members. It shall hold at least one stated meeting each month, and at such meeting one of the members, or the Secretary of the Company, shall act as secretary and keep minutes of the proceedings. This committee shall have general supervision of the finances of the Company, examine and audit all bills before they are presented to the Board of Directors for approval and payment, have supervision of the Stock Transfer Book and Stock Certificate Book, and report their proceedings to the Board of Directors at each stated meeting.

(2) The Executive Committee shall consist of two members to act in conjunction with the President on all matters relating to the general welfare of the Company. They shall hold at least one stated meeting each month, and at such meeting one of the members, or the Secretary of the

Company, shall make minutes of the proceedings, which shall be a part of the records of the Company.

#### Article IX

##### Meetings of Stockholders

The President and Board of Directors may call a special meeting of the stockholders, by mailing written notice to each of them at their last known address as registered on the Company's Stock Book, at least thirty days before such meeting.

#### Article X

##### Certificates of Stock

Certificates of stock shall be signed by the President and countersigned by the Treasurer, authenticated by the seal of the Company, and attested by the Registrar of Transfers. All certificates surrendered shall be canceled by the President and Treasurer, each of whom shall cancel his own signature, or the signature of his predecessor in office, at the time of transfer. The certificates so canceled shall be examined and reported on monthly by the Finance Committee.

#### Article XI

##### Order of Business

At all stated meetings of the Board of Directors the order of business shall be as follows: (1) To ascertain if a quorum is present on calling the Board to order; (2) Roll call of members of the Board; (3) Minutes of preceding meeting or meetings shall be read, amended, if necessary, and adopted; (4) Report of Treasurer; (5) Report of Special Committees; (6) Report of Standing Committees; (7) Unfinished business; (8) Written communications read and disposed of; (9) New business; and (10) Adjournment.

**Assignment 8.** Make a copy of the by-laws so we can submit them to the president of the company for approval.

#### PUNCTUATION AND PARAGRAPHING

Letter 12 announces a decision in favor of the Klosfit Garment Company, which we represent in the West. They have just notified us that two concerns in this city are selling an infringing garment.

**Assignment 9.** Write the letter to the following:  
Hildebrand & Mitchell, 242 Broad Street  
Renshaw Tailoring Company, 519 Prairie Avenue

## TRANSCRIBING

**Assignment 10.** Five letters will be dictated to you from our regular correspondence. Transcribe them with carbons and submit for approval.

## FILING

**Assignment 11.** File the correspondence in the alphabetical file.

## SECRETARIAL PRACTICE

**Assignment 12.** Your chief: "I have a number of things I wish you would look after today. Send this lease back to City Gas. (See letter, page 318.) It wasn't sent with the other papers. Write to Mr. Birmingham asking him if it will be convenient for him to see me next Friday afternoon. We've never had a reply from the Mitchell Motor to this letter (No. 9). Write and ask them to send us the information asked for as soon as possible. I want to get the Nolton brief finished before I go to Chicago. Here is a bill from Jackson for transcript. (Mr. E. R. Jackson is a court reporter with offices in the Municipal Building. The bill amounts to \$96. Get the bookkeeper to make out a check and send it to Mr. Jackson.) Write Mr. Talbot (see the "Answer" on page 332) and ask him to come in to see me next Thursday morning about eleven o'clock if convenient. (Mr. Talbot's address is 412 Land Title Building.) Write Mrs. Wright telling her I would be glad to call on her next Wednesday afternoon with the will which Mr. Sheppard has drawn up for her. (See "Will" page 336.) Ask her to have three witnesses present. I'll be out most of the afternoon. You can get me at the offices of the Real Estate Board."

Make notes of these instructions. Mrs. Wright's address is 1146 Spring Garden Street.



HARVEY C. WAGNER, PRESIDENT  
CHARLES M. KUHN, VICE-PRESIDENT

C. J. LOFF, CHAIRMAN OF THE BOARD

ALLAN L. CLARKE, SECRETARY  
JAMES R. READE, TREASURER

# MICHIGAN ELECTRIC AND MANUFACTURING COMPANY

MANUFACTURERS—WHOLESALE—RETAILERS

POWER — ELECTRIC MACHINERY, EQUIPMENT, FIXTURES AND SUPPLIES — LIGHT

DETROIT, MICHIGAN March 14, 1920.

Office of Chief Engineer

Mr T C Cummings  
President United Electric Welding Co.  
Detroit Mich

Dear Sir:

We are in receipt of your orders #3003 and #3018 covering the building of extensions to the 13,000 volt transmission line on your property on a time and material basis.

While we understand that you desire us to furnish the material complete on the first mentioned order, we are awaiting your instructions as to the matter of furnishing labor, since we assume that you will do the actual work of construction yourself. On the second order we will furnish both material and labor.

In your letters of January 7 and 8 signed by Mr. Brown, we were informed that you proposed to build two sub-stations in addition to the original sub-station, and the matter was brought up as to how the metering and charges for electric service would be handled. Mr. Brown furnished us with your drawing #570-B, showing a map of the property with existing and proposed transmission lines. It was then suggested that we work up a complete proposition on these changes, which we submit below:

In order that you may obtain the benefits of service to these three sub-stations on the basis of charge of one sub-station, it has been recommended that we install a separate metering station at such point as will include service to all of your sub-stations in the one metering station.

If this plan is carried out it will be necessary for us to sell to you all of our property on your side of this metering station, and we would erect the metering station at our expense. The proposed location for this station would be near your property line at the point where our high tension lines now enter. We therefore quote as follows:

#### Item #1

Present transmission line from proposed metering station at property line to present sub-station....\$5,260.00

T O O #2

Item #2

One electrolytic lightning arrester, with chokes  
coils, two potential transformers, two current  
transformers, and miscellaneous material and  
wiring..... 792.46

Item #3

One integrating and one graphic wattmeter..... 179.61

Upon receipt of your orders for the above material, we will pro-  
ceed immediately to install the metering station.

Yours very truly,  
*Ralph W. Stone*  
First Assistant Chief Engineer

RAS-JM

## ELECTRICAL SECTION

### TECHNICAL TERMS

- alternating current (A.C.)**—a succession of electric currents which rise and fall in strength and flow alternately in opposite directions at regular intervals. A *direct current* (D.C.) is one which flows always in the same direction.
- aluminum**—a malleable, ductile, silver-white metal.
- ammeter**—a device for measuring the number of amperes which are passing through a circuit.
- ampere**—the unit in measuring the strength of an electric current.
- armature**—that part of a dynamo or generator in which the electric current is produced; also a piece of iron or steel used to complete a magnetic circuit.
- battery**—an apparatus for producing or storing electric current.
- calibrate**—to adjust variations in the readings of an instrument to produce correct measurements.
- candle-power (C.P.)**—the unit of illuminating power.
- centigrade (abbreviated C., as 10°C.)**—a temperature scale with zero for the freezing point and 100 for the boiling point of water. The instrument used for measuring temperatures in scientific and electrical work is called a Centigrade thermometer. The thermometer used for ordinary purposes is the Fahrenheit.
- circuit**—the path through which an electric current flows.
- coefficient**—in mathematics, a number or letter affixed to a quantity to show how many times that quantity is to be taken.
- concentric**—having a common center.
- duct**—a passageway; a channel for wires or fluids.
- dynamo**—a machine for producing electric currents.
- electrolytic**—pertaining to the decomposition of a chemical compound into its constituent parts by an electric current.
- exciter**—a small direct current electrical generator used to excite the fields of an alternator.
- filament**—a thin wire placed in the globe of an incandescent lamp.
- generator**—an apparatus which produces electrical energy.
- grid**—an element of a rheostat; also the metal frame work of a storage battery plate.
- high tension**—a term applied to a current having a high electric pressure as distinguished from *low tension*, which is low electric pressure.
- incandescent lamp**—the term applied to that kind of electric lamp which consists of a filament fixed in an exhausted glass bulb, and heated by an electric current.

- integrating meter**—a meter which sums up the total amount of energy or current passing through it.
- kilowatt**—a unit of electrical power equal to one thousand *watts*; applied especially to the output of dynamos. Abbreviated K.W.
- lamination**—the state of being arranged in layers or thin plates.
- metering**—the act of measuring the quantity of electric current.
- millivolt**—a unit of electrical pressure equal to one-thousandth of a volt.
- molecular**—relating to the smallest mass of any substance which is capable of existing in separate form.
- ohmic**—referring to the unit of electrical resistance, which is the *ohm*.
- oscillation**—a moving forward and backward; swinging like a pendulum.
- phase**—the character of a magnetic current or machine, such as 2-phase or 3-phase, indicating the number of wires required to operate it.
- periodicity**—a term applied to the frequency of an alternating current; as, a *periodicity* of 60 cycles per second.
- polarity**—the property of attracting one pole of a magnet and repelling the other.
- potential**—a term used to indicate the pressure or voltage of an electrical circuit.
- printometer**—an instrument which automatically prints at regular intervals the measurements of an electrical meter.
- relay**—an instrument used to control the action of a larger device, as an oil switch or circuit breaker.
- resister**—a coil of wire which offers a definite resistance to the passage of an electric current.
- rheostat**—a device for regulating the strength of electric currents.
- rotor**—the revolving part of an electrical machine.
- shunt**—in an electric circuit, a branch conductor joining the main circuit at two points and forming a parallel circuit so that the current is divided.
- stator**—the stationary part of an electrical machine.
- synchronous**—running in unison or happening at the same moment. A *synchronous converter* is an apparatus which changes alternating currents into direct currents.
- transformer**—an electrical device consisting of iron core and copper windings to change the current and potential of alternating currents.
- transmission**—the conduction of electrical energy over considerable distances.
- tungsten**—a heavy white metal of high ductility and high electrical conductivity.
- vacuum**—a space containing neither matter nor gas of any kind.
- vane**—a thin paddle used to produce a movement of gas or liquid.
- velocity**—the rate of motion of a moving body.
- vitrification**—the process of turning into glass or a glass-like substance.
- voltage**—the pressure of an electric circuit measured in *volts*.
- voltmeter**—an instrument used for measuring electrical pressure
- watt**—the unit of electrical power.
- wattmeter**—an instrument for registering electrical power.

## CORRESPONDENCE

1

Mr. J. U. Thomas,  
Superintendent of Power Stations.

Dear Sir:

On March 5 the rheostat grid connection on #3 generator at the Scott Street Plant opened, causing a very severe voltage disturbance and nearly necessitating a shut-down of the whole plant. We understand that similar trouble occurred on #2 generator on January 28, causing a complete shut-down of the plant for twenty-five minutes.

This trouble apparently is due to the cutting of the set screws on the grid connections through the cable strands. We suggest that this difficulty could be eliminated by the use of a split copper sleeve or steel cap.

Kindly investigate this matter and make repairs necessary to prevent a recurrence of this trouble.

Yours very truly, (118)

2

Mr. F. W. Morrow,  
Chief Engineer,  
Randall Street Station.

Dear Sir:

Please instruct your operators to follow the directions given below for operating exciters and battery.

First. Always operate one steam-driven exciter in parallel with the motor-driven exciter. The latter must never be run alone except

under conditions of extreme emergency, and both the System Operator and this office must be notified at once when it is run alone.

Second. The control circuits must at all times be carried on the storage battery, except in cases of emergency. The permission of the System Operator must be obtained before the battery is shut down.

Under no conditions are foreign circuits to be tapped on the exciter bus or battery. If any such circuits are on the exciter bus at the present time, they must be taken off at once. Notify this office promptly at any time when the steam-driven exciters are out of repair.

Yours very truly, (150)

3

Mr. K. W. Coyle,  
General Manager, Sanders Brick  
Co.,  
Gloucester, Mass.

Dear Sir:

Your letter of July 22  
Alundum Cement

You are mistaken in your surmise that this cement is similar to Portland cement. On the contrary, it is a highly refractory substance which becomes hard by being burned at very high temperatures. It is mainly aluminum oxide mixed with a proper amount of bonding material, and can be supplied in different degrees of refractoriness. For general purposes the mixture RA-162 is recommended.

In applying this material as an insulator for electric furnace cores or other purposes, the powder is mixed with sufficient water to make a stiff mass and is then applied in the plastic condition. It is next thoroughly dried in the air and finally burned in a furnace or by passing a current through the resistor until complete vitrification takes place. This process gives a protecting layer of high resistance and high thermal conductivity.

Under separate cover we are sending you one of our latest catalogs, which we believe you will find interesting and useful.

Yours truly, (174)

4

Michigan Electric & Mfg. Co.,  
Detroit, Mich.

Gentlemen:

The Electrical Apparatus Committee of the National Electric Light Association earnestly requests your cooperation in creating a uniform standard of polarity for transformers. This matter is discussed and explained in the enclosed leaflet taken from the Transformer Standards as reported by the committee to the association at the Atlantic City Convention in June.

When the report was presented, the committee requested advice as to the advisability of standardizing polarity as set forth in the pamphlet, but very few replies have been received from operating companies. The Electrical Apparatus Committee desires a definite statement from

operating companies on the advisability of recommending this important change to the manufacturers, who stand willing to put it into effect immediately if approved by the association.

Will you kindly inform the committee whether your company will approve of the change? If it is adopted, provision will be made by the manufacturers, subject to the approval of the committee, for a clear and positive identification of transformers having the subtractive polarity wherever the polarity differs from that of transformers previously manufactured by the same company, and in all cases the leads will be plainly marked in accordance with the standards already established.

Your early consideration and reply are urgently requested by the committee.

Yours very truly, (211)

5

General Manufacturing Co.  
Albany, N. Y.

Gentlemen:

Your letter of the 17th with reference to 100 and 200 H. P. Motors has been received. The engines are described as follows:

100 H.P. Westinghouse type "M" Motor, 220 volts, D.C., 680 R.P.M., four pole, compound wound, with base, new starting box, no pulley. This motor is now in our ware-

house, and we guarantee it to be in first-class condition free of electrical and mechanical defects. | We offer it at a price of..... \$900.00 less 10% f.o.b. cars.

The 200 | <sup>100</sup> H.P. Motor should properly have been listed as a generator, its description being as follows:

200 K.W. | Westinghouse Generator, 3 phase, 60 cycle, 440 volts, 263 amp. per terminal, 600 | R.P.M.; with 7½ K.W.; 125 volts, D.C., 60 amp. exciter. | We quote a price of . . . \$2000.00 f.o.b. cars, less 10%, point of shipment being | Boston, Mass.

Please understand that the switchboard and starting apparatus go with the generator, and that the outfit is complete. | <sup>200</sup>

The above quotations are made for prompt acceptance, subject to prior sale, on terms of one-half cash with the | order, the balance subject to sight draft with bill of lading attached. You are privileged to make inspection before shipment. |

Yours very truly, (243)

6

Mr. W. H. Craig,  
National Electric Light Association,  
410 Mercantile Bldg.,  
Denver, Colo.

Dear Sir:

In answer to your inquiry of the 5th instant, the 120-240 volt D.C. | service supplied last year amounted to 26,500,000 kilowatt hours; the 60 cycle service, 31,000,000; | the 25 cycle 4000 volt service, 4,000,000; and the 25 cycle 13,000 volt | service, 68,500,000 kilowatt hours.

In addition to the above there was the street lighting load; | therefore the low-tension commercial service was about equally divided between direct and alternating current. The center of the city | <sup>100</sup> is provided with a municipal duct system in which direct current is used, supplied from our Beach Alley Sub-Station, | with storage battery reserve. The main streets radiating out from this concentrated district, but included in the underground district, are | supplied with underground alternating current, which is included in the statement of 60 cycle current made above.

In sections of | the city outside of the underground district we are using the so-called combination district or alley distribution method of | supply, the conductors in the streets

being underground, but the transformers being located on a transformer pole in the alley, |<sup>200</sup> all of the houses within the block being supplied overhead. The company's territory covers about 280 square miles, | and outside of the underground and alley distribution districts referred to above, we use the straight overhead distribution method.

Direct | current distribution is being curtailed by limiting it to the concentrated underground system indicated above; that is, within a reasonable | distance from the Beach Alley Station.

Very truly yours, (269)

7

Union Rolling Mill Co.,  
Erie, Pa.

Gentlemen:

We are very glad to reply to your inquiry of the 11th instant in regard to our "Standard" electric | drills and grinders. As the result of actual service tests we believe that these tools represent the highest achievement, both | electrically and mechanically, in the development and construction of electric tools.

Our electric drills and grinders are built on the | unit plan, each tool consisting of five simple units. They can be easily dismembered without disturbing any electrical connections. All | brush holders and wires are located in the frame unit and are not disturbed when the caps are removed

Series |<sup>100</sup> motors are employed on direct current universal drills.

The direct current grinders have compound wound motors which run at constant | speed. Alternating current motors are field coil wound, the coils being carefully placed in slots and highly insulated. The rotor | winding is of the familiar squirrel cage type. Every motor is insulated and impregnated throughout by a special process. The | armature and stator are built up of soft steel laminations consisting of the highest grade soft electrical sheet steel. The | commutator represents the very best design and practice for this purpose.

Our tests are most thorough. They are given in |<sup>200</sup> our factories under actual service conditions, and every motor is subjected to a high voltage test to insure perfect insulation | throughout.

The Pedestal grinder, about which you inquire, is fitted with water pot, wheel guards, and tool rests. This grinder | has ball-bearings throughout. The motor is fully enclosed and is dirt and dust proof. The gross weight of the | grinder is 150 lbs.

We are enclosing a pamphlet which gives illustrations and prices.

Yours truly, (278)

8

Moore Machinery Co.,  
Moline, Ill.

Gentlemen:

We have your letter of March 10 in reference to the 76 K.W. 250 volt | belted type generator, which you



have connected to your 100 H.P. 3 phase synchronous motor.

We see no reason why a 100 H.P. motor should not drive a 75 K.W. 100 H.P. generator, unless your voltage is low. You do not state whether you have tested out the shunts and series fields. If you have not done this, we believe it would be advisable to have this test made before you go ahead and incur unnecessary expense.

Your shunt and series field coils should be tested out with a voltmeter to see that they are properly connected, and this will indicate to you whether the trouble lies in the fields or not. If the trouble is not there, it is without doubt in the line; that is, your D.C. voltage is low, and you should take the matter up with the power company and have them make a test on the line to see why they cannot give you proper voltage for running this outfit.

The 75 K.W. 250 volt generator should develop approximately 272 volts and 272 amperes at full load.

After you have tested out the field coils, we would like to hear from you, as we do not think it advisable to go ahead and make a lay-out of the shunt fields to see whether additional copper may be added. This no doubt can be done to some extent, but if your present coils are in good condition there is no necessity of it.

Yours truly, (289)

9

Westinghouse Electric & Manufacturing Co.,

East Pittsburgh, Pa.

Gentlemen:

We have your letter of July 13 by Dr. Spencer, chief of laboratory service.

Each Ward-Leonard Resistance Unit consists of a porcelain tube wound with a special resistance wire of practically zero temperature coefficient. The tube after being wound with wire is covered with a vitreous enamel, which holds the wire firmly in place. This also makes the entire surface of the tube available for emitting heat energy instead of merely the small surface of the wire, and greatly increases the watt capacity of a tube of given size. The copper connecting wires or terminal leads consist of 100 round copper braids, each composed of a large number of flexible copper wires. Grounding is absolutely impossible, as the support is composed of the most perfect insulating material.

The resistance wire on each resistance unit is tested at a maintained temperature of 1200°F. during the process of manufacture, which assures that the ohmic resistance of the unit will not change in service because of molecular changes, aging, etc.

The Ward-Leonard Vitreous Enamel Unit is the only commercial form of high resistance made of

material of practically zero temperature coefficient. The finest wire, when properly imbedded in <sup>200</sup> the special enamel used for these units, is entirely free from any mechanical strain due to heating and cooling, and <sup>1</sup> is perfectly protected against all oxidation or other chemical depreciation. Oxidation and depreciation are invariably met with where fine resistance <sup>1</sup> wires at high temperature are exposed to the air, water, or dust at any part of their length, or are <sup>1</sup> imbedded in any materials such as cement, japan, shellac or any other insulating material heretofore used, with the single exception <sup>1</sup> of enamel.

We are sending you a number of the units for purposes of experimentation.

Yours very truly, (298)

10

Mr. T. C. Cummings,  
Pres., United Welding Co.,  
Detroit, Mich.

Dear Sir:

Since writing you this morning it has occurred to us that another factor which will probably enter into <sup>1</sup> this proposition is the matter of metering sub-station #2 until such time as the proposed main metering station <sup>1</sup> can be finished. We understand that you desire both integrating and graphic wattmeters in sub-station #2 for your <sup>1</sup> own records. We therefore propose to furnish you the following material, with the understanding that you are to install these <sup>1</sup> instruments and that we are to have

the privilege of control; that is, checking the wiring, testing the meters, and <sup>100</sup> keeping them in repair until such time as the main metering station is installed, at which time we would bill <sup>1</sup> you the following amounts for the equipment furnished:

|   |          |
|---|----------|
| One integrating and<br>one graphic wattmeter<br>of the type now in-<br>stalled in <sup>1</sup> your sub-<br>station #1..... | \$179.61 |
| Two potential and two<br>40 ampere current <sup>1</sup><br>transformers.....  | 355.76   |

We have already issued orders to our Meter Department to deliver <sup>1</sup> to your company these two meters with potential and current transformers, as we understand you desire to have them put <sup>200</sup> in and ready for operation by March 1.

As an alternative to the complete proposition of a new metering station, <sup>1</sup> we could furnish the metering equipment and lightning arresters in your new sub-station, refund to you amounts paid us <sup>1</sup> for building the two new primary extensions, and retain ownership of all high tension lines to the sub-station. Under <sup>1</sup> this arrangement we would charge you for electric service on the basis of our "T3" schedule, which provides for <sup>1</sup> furnishing service under one contract to various locations. I enclose a copy of this schedule which you will note provides <sup>200</sup> for taking a separate reading at each sub-station and pooling the kilowatt

hour consumption of the various sub-stations. |

Yours very truly, (323)

11

Mr. F. H. Rowland,  
Chief Electrical Engineer.

Dear Sir:

It seems that the oil-switch problem is a live one and that the present switch is not | satisfactory. I have made some experiments, and believe that the rupturing capacity of the switch can be improved.

Before the | short circuit occurs the pressure of the oil around the contacts is equal in all directions; therefore when the contacts | start to open, metallic gas forms and pushes the oil away in all directions, forming a pocket for the conducting | gas between the contacts, which allows the current to continue even though the contacts are parted. This may continue for | <sup>100</sup> several cycles, during which time the oil is being broken up into explosive gases, which may explode and destroy the | switch.

To overcome this trouble I propose to supply some means for unbalancing the oil pressure around the contacts, preferably | before the contacts part, so that as soon as metallic gas forms, it will move from between the contacts and | cool oil will flow in its place, which will prevent the circuit from re-establishing itself through the gas. This | is not difficult to do as in the average switch the primary contact moves about one inch before the secondary | <sup>200</sup> con-

tact part and travels at the rate of about two feet per second, which will make it possible to get | the oil around the contacts in motion before the secondary contacts part, and will allow sufficient room between the contacts | for oil at the end of one alternation to insure against the renewal of the circuit.

This may be accomplished | by attaching vanes to the contact rod above the contacts, so that as the rod moves downward a flow of | oil will be created outward past the contacts. By attaching a piston to the rod below the contacts, which piston | <sup>300</sup> will move in a cylinder, a vacuum may be formed which will draw the oil downwards. This will cause the | oil to flow into the cylinder past the contacts and carry the gas away from between them. With cylindrical oil | tanks, vanes may be attached to the rods in such a way as to cause the oil to rotate in | the tank.

Any method of causing the oil to move past the contacts should accomplish the results, but it is | preferable that the oil start to flow before the contacts separate. It is desirable to circulate the oil without employing | <sup>400</sup> any additional mechanism, but the results may be better if auxiliary means are provided for moving the oil.

Please inform | me whether you consider the suggested changes of value.

Yours very truly, (431)

12

gentlemen you can add from one to three feet to the travel of your crane hook by using the palmer safety limit stop described in the enclosed leaflet and at the same time eliminate once and for all the repeated adjustment which is necessary with the old style limit switch it will positively stop the crane hook within two inches no matter what the load on the hook may be or at what speed it is being raised the palmer stop is not geared to the hoisting mechanism or operated by a travelling nut its adjustment is independent of the

stretching of the hoisting rope it can be used in connection with any make of controller the palmer safety limit stop not only cuts the current off the motor but applies dynamic braking which provides the simplest and most reliable means for quick stopping it is possible to lower the hook at a reduced speed after the palmer stop has been tripped but further upper travel is impossible you cannot but be interested in this limit switch the writer will be pleased to call and explain any details of operation or installation which may not be clear to you yours very truly

### OFFICE TRAINING ASSIGNMENTS

In this section you are employed by the Michigan Electric & Manufacturing Company as stenographer to the Chief Engineer.

#### TECHNICAL TERMS

**Assignment.** Copy the list of technical terms and practice the outlines.

#### ARRANGEMENT

The practice in the offices of many large corporations of signing letters only by the title of the individual who dictated them is shown in the style letter.

**Assignment 1.** Copy the style letter with carbon on form 45.

**Assignment 2.** Copy letter 11 with carbon on a letterhead. Present both letters for signature.

#### TECHNICAL COPY

**Assignment 3.** Copy the following selection without carbon. It is taken from a pamphlet entitled "Electrical Equipment for Ventilating Service" issued by the Westinghouse Electric & Manufacturing Company. The selection contains 1236 words. At what net speed can you write it?

### Types of Motors and Their Application

Depending on the kind of current they use, motors are divided into two main classes: namely, direct current and alternating current. These two classes differ from each other in several important characteristics, and these must be taken into consideration in selecting a motor for a given application.

In general, the kind of current available will determine the kind of motor to be used. In the past most large buildings had individual plants which invariably supplied direct current. The present tendency, however, is toward the use of central station power, because of its greater reliability, economy, cleanliness, convenience, and safety; and |<sup>100</sup> except in the business sections of some of the largest cities, central stations supply alternating current. As will be seen, direct current motors offer several advantages over alternating current motors for some ventilating applications, and occasionally it is desirable to use direct current motors even if alternating current only is supplied by the central station. It is not necessary, however, under these conditions to forego the advantages of central station power. The Westinghouse Electric & Manufacturing Company supplies a complete line of motor-generator sets for transforming alternating current into direct. These sets are very efficient, quiet in operation, require |<sup>200</sup> little attention, and can be placed in any convenient location. Their use permits the architect to lay out an ideal installation because he is free to select for each machine throughout the building either an alternating current motor or a direct current motor.

#### Direct Current Motors

The two chief characteristics of direct current motors that make this type especially suitable for ventilating service are: (1) they can be obtained with very low speeds, and (2) their speed can be varied over a wide range and with as many separate steps as desired.

Slow speed is desirable because the speeds of |<sup>300</sup> most fans and blowers are low, and hence slow-speed motors can be directly connected to them, thus forming the most compact, reliable, efficient, quiet, and easily installed unit.

The general purpose motor is of comparatively high speed and therefore cannot ordinarily be used for direct connection to fans and blowers. But part of the Westinghouse line of ventilating motors consists of a

series of motors ranging in size from 1/2 to 50 H. P. and in speed from 110 to 500 R. P. M. In addition to this special line, a large number of standard Westinghouse motors of all sizes are available with higher speeds for belted or chain drive, or for direct connection to high speed fans and blowers.

Among the features that make these motors specially suitable for ventilating service are their quiet operation, freedom from leaking oil, the wide range of speed variations obtainable with each motor, and, above all, their reliability, long life, and efficiency of operation.

The reliability and long life of these motors are due mainly to the long experience of the Westinghouse Electric & Manufacturing Company in the manufacture of motors. Most of the elements of construction and design responsible for this excellence lie hidden where even an expert can hardly trace them—in the quality of the installation, cool operation, absence of local hot spots, proportion of bearings and shaft, etc. But some lie on the surface where all can see them.

The rolled steel frame is an example. In almost all other motors the frame is of cast-iron, but the Westinghouse Company has taken a long step in advance and, following the evolution that has produced such remarkable results in other lines (bridges and buildings for example), has made standard a construction that is at once light, compact, and yet immensely strong. The strength of Westinghouse motor frames is far greater than any stresses they will ever be called on to endure in the service for which they are intended. Nor is it possible to break the feet or other parts through carelessness during installation—accidents that may occur with cast-iron frame motors. Their lightness facilitates handling, and their small dimensions make it often possible to fit them into small spaces where cast-iron frame motors could not go.

The design of the bearings is another case in point. Not only are they of large size, but they are automatically flooded with oil when the motor is in operation, and are dustproof. In consequence they last many years in even the severest service, and they can be quickly and economically renewed.

With most direct current motors the point of weakness lies in the commutator. Even a slight amount of sparking will sooner or later damage the commutator and brushes and cause a whole host of troubles. In Westinghouse motors these troubles have been eliminated by simple eliminating the sparking. The use of commutating poles and the general excellence of

design suppress all <sup>800</sup> sparking even under heavy overloads. In ventilating service where the motors often run continuously and are located where access to them is difficult, this absence of commutator troubles is of foremost importance.

Second only in importance to long life and reliability in a ventilating motor is efficiency of operation. With a motor operating continuously, or nearly so, even a slight saving in the power bills mounts up into surprisingly large figures in the course of time. Therefore the motor that is superior to another by merely a per cent. or so in efficiency will be vastly more economical in the <sup>900</sup> long run and will save any slight difference in first cost within a few months. In purchasing motors, therefore, efficiencies should be compared, not only those at full load but also at the fractional loads at which the motor will frequently run. A comparison of this sort will make clear one of the reasons why the use of Westinghouse motors in ventilating service is rapidly increasing.

**Speed Control of Direct Current Motors**—With many ventilating applications speed control is not desired, the fan or blower running always at a constant speed whenever it is in operation; but with others, speed <sup>1000</sup> control is essential since the volume of air handled must be varied with varying conditions, such as temperature, amount of smoke and fumes present, etc.

There are three methods by which the speed of properly designed motors can be varied, and Westinghouse ventilating motors are suitable for use with any of these. Without going into technical details these three methods can be briefly described as follows:

1. Field Control. In this method the normal speed of the motor is the lowest speed, and speed variation is secured by increasing this speed.
2. Armature Control. Here the normal motor speed is <sup>1100</sup> maximum and variations lower this speed.
3. Combined Field and Armature Control. This method combines the other two, giving a wide speed range with the normal motor speed in about the middle.

Which of these three methods should be selected depends on circumstances. The general rule can be laid down that a motor operates most efficiently at its normal speed, so that if a fan or blower must ordinarily be operated at a low speed which is only occasionally increased, method No. 1 should be used. If on the other hand, the ordinary speed of the fan or blower is <sup>1200</sup> high with occasional speed reductions, then method No. 2 is

indicated. Where a very wide speed range is essential and operations may take place at long intervals on any step, No. 3 will probably be best. (1236)

## LIST OF INSTALLATIONS

**Assignment 4.** Make a copy without carbon of the following list showing details of motor installations.

| Type and Size of Mill        | H. P. | Full Load<br>R. P. M. | Power Characteristics | Plant  |
|------------------------------|-------|-----------------------|-----------------------|--|
| 8-inch Merchant Tube Rolling | 300   | 365                   | 2200 v., 25 cy.       | Cambria Steel Co.,<br>Johnstown, Pa.                 |
| Cold Rolls                   | 300   | 345-500               | 500 v., d.c.          | Pittsburgh Steel<br>Products Co., Mo-<br>nessen, Pa. |
| Seamless Tube                | 300   | 300                   | 230 v., d.c.          | Trumbull Steel Co.,<br>Warren, Ohio                  |
| Cold Rolls                   | 300   | 350                   | 2200 v., 25 cy.       | Timken Roller Bear-<br>ing Co., Canton,<br>Ohio      |
| Merchant Bar                 | 300   | 350                   | 2200 v., 60 cy.       | Mansfield Sheet & P.<br>P. Co., Mansfield,<br>Ohio   |
| 18-inch Rough<br>Std. Copper | 300   | 450                   | 230 v., d.c.          | Carbon Steel Co.,<br>Pittsburgh, Pa.                 |
| Cold Rolls                   | 300   | 585                   | 440 v., 60 cy.        | Underground Cable<br>Co., Perth Amboy,<br>N. J.      |
| Cold Rolls                   | 300   | 350                   | 2200 v., 60 cy.       | Whitaker-Glessner<br>Co., Wheeling, W.<br>Va.        |
| Cold Rolls                   | 300   | 350                   | 2200 v., 60 cy.       | Whitaker-Glessner<br>Co., Portsmouth,<br>Ohio        |
| Tube Mill                    | 300   | 500                   | 550 v., 25 cy.        | Baltimore Tube Co.,<br>Baltimore, Md.                |



| Type and Size<br>of Mill        | H. P. | Full<br>Load<br>R. P. M. | Power<br>Characteristics | Plant   |
|---------------------------------|-------|--------------------------|--------------------------|---|
| 21-inch Plate<br>(Cold Rolling) | 350   | 345                      | 440 v., 60 cy.           | Morris-Bailey Steel<br>Co., Wilson Sta.,<br>Pa.                     |
| Cold Rolls                      | 350   | 145                      | 2200 v., 60 cy.          | Massillon Rolling<br>Mill Co., Massil-<br>lon, Ohio                 |
| Merchant                        | 350   | 580                      | 2200 v., 60 cy.          | Copper Clad Steel<br>Co., Pittsburgh,<br>Pa.                        |
| Sheet                           | 350   | 320                      | 2200 v., 60 cy.          | Universal Rolling<br>Mill Co., Bridge-<br>ville, Pa.                |
| 24-inch Flat<br>edging          | 350   | 490                      | 6600 v., 25 cy.          | American Steel & Wire<br>Co., Cleveland,<br>Ohio, Cuyahoga<br>Works |
| 8-inch Wire                     | 360   | 300-425                  | 230 v., d.c.             | United Alloy Steel<br>Corp., Canton, Ohio                           |
| 7-inch Wire                     | 360   | 350-500                  | 230 v., d.c.             | United Alloy Steel<br>Corp., Canton, Ohio                           |
| 8-Inch Merchant                 | 400   | 400-450                  | 220 v., d.c.             | Illinois Steel Co.,<br>Milwaukee, Wis.                              |

**Assignment 5.** Prepare bills on the billheads marked "form 46" for the following electrical equipment sold today.

1. Sold to Port Huron Electrical Supply Co., Port Huron, Mich., their order X-265 received three days ago, our order #5699, shipped today by G. T. frt., terms 2/10, 1/30, n/60.

|   |       |                |
|---|-------|----------------|
| 24 K P 315—110 V 1/16 H P-A C Motors                            | 11.50 | 276.00         |
| 36 K P 316—110 V 1/16 H P-D C "                                 | 11.50 | 414.00         |
| 1 Type C 30 K W, 1100—2200 V, 60 cycle Peerless<br>Transformers |       | 350.00         |
| 50 S 3024 D C Osc. Desk Fans, 12"                               | 34.00 | 1700.00        |
| 100 N 602 Radio Tubular Flashlights                             | 1.20  | 120.00         |
|   |       | <u>2860.00</u> |

2. Sold to Reo Motor Car Co., Lansing, Mich., their order 21452, received on the 17th of the previous month, our order #4173, shipped three days ago by P. M. fast frt., terms 3 /30, 2 /60, 1 /90, net 4 mos.

|  |       |                |
|--|-------|----------------|
| 150 Type R 6 volt Mich. Standard Starting Motors complete with mountings | 21.75 | 3262.50        |
| 150 Type R 6 volt Mich. Standard Generators complete with mountings      | 18.65 | 2797.50        |
| 150 Type R Starting Switch for above                                     | 1.95  | 292.50         |
|  |       | <u>6352.50</u> |

3. Sold to Southern Electric Company, New Orleans, La., their P. O. 2956 received three weeks ago, our order #4780, shipped today by W. frt., c/o I. C. at St. L., terms 2 /30, n /60.

|   |       |       |                |
|---|-------|-------|----------------|
| 5 Pkgs. C 1003-3 Amp. Union Fuses, 100 ea.      | 500   | .22½  | 112.50         |
| 3 " C 1005-5 " " " "                            | 300   | .22½  | 67.50          |
| 4 " C 1006-6 " " " "                            | 400   | .22½  | 90.00          |
| 1 " C 1013-20 " " " "                           | 100   | .25   | 25.00          |
| 2 " C 1024-75 " " " 50 ea.                      | 100   | .92½  | 92.50          |
| 2 " C 1037-250 " " " 25 ea.                     | 50    | 1.50  | 75.00          |
| 1 " C 1045-500 " " " 10 ea.                     | 10    | 2.00  | 20.00          |
| 15 S. U. 18 Hoyt Rheostats, 125 V               |       | 3.75  | 56.25          |
| 12 B C 4-60 C. P. Comet Magnetos                |       | 32.50 | 390.00         |
| 1 K P 175-4 H P-A C Motor, 60 Cycle, 1150 R P M |       |       | 56.38          |
| 2 #761-1½" Murdock Condensers, ½ K W            | 10.20 |       | 20.40          |
| 1 #842 " Transformers, ½ K W                    |       |       | 18.00          |
|   |       |       | <u>1023.53</u> |

4. Sold to Ohio Electric Service Company, Mansfield, Ohio, their order 562 received five days ago, our order 5642, shipped yesterday L. S. & M. S. frt., terms 2 /10, n /30.

|                                   |       |               |
|-----------------------------------|-------|---------------|
| 6 V 1-10 W 110 V Vim Transformers | 1.75  | 10.50         |
| 10 V 3-12 W 110 V Vim "           | 2.50  | 25.00         |
| 12 S 3006 A C Bracket Fans, 12"   | 19.50 | 234.00        |
| 12 S 3016 D C " " 12"             | 19.50 | 234.00        |
|                                   |       | <u>503.50</u> |

#### PUNCTUATION AND PARAGRAPHING

**Assignment 6.** Write letter 12 with carbon to the following firms:

United Alloy Steel Corporation, Detroit, Mich.

Wright Wire Company, Toledo, Ohio.

Youngstown Sheet & Tube Company, Youngstown, Ohio.

## TRANSCRIBING

**Assignment 7.** Transcribe the five letters which will be dictated to you. Submit your work for approval.

## FILING

**Assignment 8.** File the correspondence in the alphabetic-numeric file. The carbons of the bills are to be filed in the Shannon file.

## SECRETARIAL PRACTICE

All business houses take an inventory at intervals to determine the value of the stock on hand. Have you ever thought about taking an inventory of yourself?

"Oh, wad some power the giftie gie us  
To see oursels as ithers see us."

The attempt to analyze one's own temperament and characteristics is both fascinating and instructive. Sit down and with calm deliberation take stock of yourself in the light of the characteristics which distinguish a good secretary. Give yourself a mark of A (good), B (fair), or C (poor) on each of the qualities mentioned. Make an attempt to rid yourself of your natural prejudice in your own favor, for this represents a serious effort at self-analysis.

1. *Health.* Do you have many "off days"? Do you tire easily? A secretary for the most part leads a strenuous business life. If he does not have good health, he will find it hard to be cheerful.

2. *Dress.* Are you careless in this respect? Do you prefer "flashy" or "sporty" clothes?

3. *Initiative.* Do you like to "start things?" Think of yourself in your social and school relations. Do you take hold of a new situation readily? Does your interest flag easily? If you decide that you have initiative, ask yourself if you are as good a "finisher" as a "starter."

4. *Memory.* Do you have a good memory for faces? for names? for incidents? Try to think of ten people whom you have met in a casual way recently. Can you remember their names?

5. *Trustworthiness.* Do you regard yourself as trustworthy? Have you made good in such responsibilities as may have been placed upon you in your social and school life?

6. *Coöperation.* Do you think people generally enjoy your company? Are you a "wall flower?" Do you work harmoniously with others? What is your attitude toward class, school, and social affairs? Are you quarrelsome or headstrong?

7. *Tact.* Do you have a feeling frequently that you have said the wrong thing? Do people talk to you easily and naturally, or does their manner seem constrained?

8. *Concentration.* Do you often make mistakes in tests because you fail to read a question carefully? Are you easily disturbed in your reading or studying by people entering or leaving the room?

9. *Method.* Do you think you are methodical? Have you ever kept a diary? Did you ever try to devise a "time schedule" to cover your day's activities? Are the books and papers in your desk arranged according to some definite plan? Are you often late? The good secretary is preeminently a master of detail.

10. *Speech.* What about your conversational abilities? Have you any speech defects? Is your grammar good? Are you "backward" in a group?

You may never have formulated in your mind just what are the strong points and the shortcomings in your temperament and character. An honest attempt at self-analysis will help to do just that. The first step in ridding yourself of a wrong attitude or a temperamental fault is to understand what your handicaps are. And remember, finally, that faults of temperament and wrong habits can be corrected.

## SECURING A POSITION

### YOUR QUALIFICATIONS

You have now completed your course in shorthand, typewriting, and secretarial practice and are ready to "sell" the knowledge you have acquired. Every successful salesman knows definitely the nature and characteristics of the goods he is selling. In selling *your services* you must have clearly in mind your qualifications and the extent of your ability. Vague and indefinite statements carry no value with a prospective employer.

**Assignment 1.** Write a definite statement of your qualifications for a stenographic position.

What has been your general education and where was it secured? What has been your business training? What is your speed in shorthand? On the typewriter? Is your typewritten "copy" neat and accurate? Have you mastered the principles of effective display? What machines do you operate? What definite information about business papers, billing, filing, and other features of office routine have you acquired from this course? Have you had any business experience of any nature?

### THE LETTER OF APPLICATION

The usual way of getting in touch with a position is by writing a letter of application to a prospective employer. You may secure information about a position through your teacher or through the principal of your school; or you may answer an advertisement in the "Help Wanted" columns of a newspaper.

Mechanically your letter of application should be a perfect specimen of good arrangement. In applying for a stenographic position, you should usually write your letter on the typewriter. Your signature, however, should always be written with pen and ink. Your letter should state your qualifications for the position as forcefully as possible, but without exaggeration. Be specific. Avoid loose general statements and stereotyped expressions. Your letter may be one of a score or more which the business man receives about the position for which you are applying; therefore, make your letter just as brief as you can while still giving all the necessary information. The business man has certain definite work to be done for which he is willing to pay. The object of your letter is to convince him that you will give "value received."

The Curtis Publishing Company of Philadelphia, publishers of the "Saturday Evening Post" and the "Ladies' Home Journal," is one of the largest employers of stenographers in the country. From scores of letters received in

reply to an advertisement for a position for which no previous experience was required, the employment manager selected the writers of the following letters to call for interviews. Many letters were thrown into the waste-basket because they evidenced slovenly habits and carelessness on the part of the writer. These three letters were faultless in their typing and arrangement.

—1—

2026 N. 18th St., Philadelphia, Pa.,  
June 10, 19—

2463 Public Ledger,  
Philadelphia, Pa.

Gentlemen:

Your advertisement in the "Public Ledger" for a stenographer interests me. I am eighteen years old and am a graduate of the commercial course of the William Penn High School.

I can write accurately at the rate of forty-five words a minute on the typewriter and am familiar with the Remington and Underwood machines. I have successfully passed a test in shorthand in which the dictation consisted of a newspaper editorial dictated at the rate of ninety-five words a minute. I have maintained a fairly high average in my English work throughout the course. My mark for the last two terms' work in this subject was "A," which is equal to 90.

I have had no actual office experience, but have satisfactorily written some correspondence for Mr. ———, the principal of the William Penn High School, and Mr. ———, the head of the Commercial Department.

I earnestly trust that you will grant me the favor of an interview, because I believe I can convince you that I can do neat, accurate, and rapid work.

My telephone number is Woodland 1428-W.

Yours truly,  
(Miss) Elizabeth J. Jordan

—2—

7521 Girard Avenue, Philadelphia, Pa.,  
June 9, 19—

2463 Public Ledger,  
Philadelphia, Pa.

Gentlemen:

May I be considered an applicant for the position which you advertised in today's "Public Ledger?" My education has included two years' work in the West Philadelphia High School for Girls, and I am just about to complete an eight months' course at the ——— Business College. I was obliged

to leave high school before completing my work because of the extended illness of my father, which left me almost entirely dependent upon my own resources. While I am without actual experience in the business world, I have every reason to believe that my education, natural adaptability, and willingness to learn will soon make good that deficiency.

Mr. \_\_\_\_\_, principal of the \_\_\_\_\_ Business College, will be very glad to give you information about my work. His telephone number is Market 4280.

May I have the opportunity of calling at your office for a personal interview?

Yours truly,

(Miss) Alice W. King

—3—

406 N. 53d St., Philadelphia, Pa.,  
Telephone, 2687-J Girard  
June 9, 19—

2463 Public Ledger,  
Philadelphia, Pa.

Gentlemen:

Your advertisement in today's "Public Ledger" attracted my notice. I would like to be considered an applicant for the position.

I am just about to finish the commercial course at the Frankford High School. I have had unusually good marks in my studies, particularly in shorthand and typewriting. In addition, I might mention that during the last two years of my school work I was never late and absent only two half-days.

During the summer of 19— I was employed in the office of Holman & Kinsman, commission brokers, 222 S. Third St. I enclose a letter from Mr. Kinsman.

I hope that my letter will induce you to give me an interview. I may say that I am not so much interested at present in the salary as I am in the opportunities that the position seems to offer.

Very truly yours,

(Miss) Mary C. Jenkins

The following letter is one of those consigned to the waste-basket by the employment manager:

1142 N. 19th St., Philadelphia, Pa.

2463 Public Ledger,  
Philadelphia, Pa.

Gentlemen:

Your advertisement for a stenographer attracted my attention. I want to attract yours and hereby make application for the same. My education has been very good. I have had no experience, but I am very good in shorthand and typewriting and feel sure I could more than fill your requirements.

I took two years in the \_\_\_\_\_ High School. I was absent only five days in the two years and I think this statement should carry weight because regularity of attendance and punctuality are valued in the business world.

Hoping to hear from you, I am

Sincerely yours,

The shortcomings of this letter are self-evident. The date was omitted. The writer uses stereotyped expressions, such as *hereby* and *same*, which mean nothing. The statement in the second sentence is flippant and creates the impression that the writer of the letter wishes to appear "smart." Twice she uses the expression "very good"—which is so indefinite as to be meaningless. The statement that the writer can "more than fill the requirements" has a smack of boasting.

The second paragraph is poorly worded. Furthermore, the writer assumes to tell the business man the value of certain business virtues. "Hoping to hear from you" is a hackneyed expression which may well be avoided. The closing phrase, "Sincerely yours," should not be used in a letter of this character.

**Assignment 2.** Study carefully the three successful letters of application and rewrite the foregoing faulty letter. Make it specific, courteous, and effective

**Assignment 3.** Write answers to the following advertisements. Use blank paper. Before writing your letters, read the advertisements carefully and be sure to give all the information called for.

#### HELP WANTED—FEMALE

##### STENOGRAPHER

An intelligent young lady; permanent position with attractive salary to start; experience not necessary. State age, education, and qualifications. 2278 Herald office.

**Stenographer**—No objection to beginner; daylight office; pleasant surroundings; excellent opportunity for advancement. State education and reference. 3056 Herald office.

#### HELP WANTED—MALE

##### STENOGRAPHER

and typewriter; young man about 18 years of age in advertising office; good education required; experience not necessary. 4241 Herald office

**Wanted**—Bright alert young man with knowledge of shorthand and typewriting who can work himself into permanent position as store manager with large tire company. Beginner with good education considered. 2468 Herald office.

#### THE PERSONAL INTERVIEW

The first impression which you make when you call upon the employer will be created by your general appearance. Dress neatly; flashy clothing is always out of place in the business office. Be prepared to make your answers to



questions about your qualifications as definite as possible. You will probably be called upon to take several letters in shorthand and transcribe them as a test of your ability. Try to keep cool and collected. Put forth every effort to make your transcripts not only accurate but attractive in appearance.

**Assignment 4.** Your teacher will conduct personal interviews with members of the class.

THE STENOGRAPHER  
FROM THE BUSINESS MAN'S POINT OF VIEW

An official of an important railroad wrote the following letter to the principal of a business school in reply to an invitation to address the graduates of the school:

Dear Sir:

On my return to the office I find your courteous letter of June 2 inviting me to be present at your annual commencement and deliver an address to the members of your graduating class. I regret that it will be impossible for me to be with you on that date. Work already laid out for me will take me to a distant part of our line so that it will be impossible for me to get to \_\_\_\_\_ in time.

I do not know that I could say anything to your students and graduates that would be more helpful to them than the suggestion that in the pursuit of their work in your school they give more consideration to the element of *time*. The complaint most frequently made about young men and women who enter our employ is that they take too much time to accomplish a given task. Students in school often seem to be given unlimited time to do their work. The stress seems to be placed on neatness and exactness with very little consideration of the ultimate cost of the time taken to accomplish the work. This is one of the strongest criticisms made against stenographers that we employ.

The writer has found that a great many young men and women who come into our office do so with an entire absence of what can be expressed by the slang expression, "pep and ginger." Few things count so heavily against a stenographer, it seems to me, as a listless attitude toward her work.

My experience leads me to believe that few stenographers understand or appreciate the importance of a practical knowledge of English. So many of the young men and women we employ cannot express themselves intelligently. The kind of girl who can correct any slips in grammar that I may make in dictation is exceedingly hard to get.

What I have said may appear very trite to you, but as one who has employed hundreds of young men and women I ask you to believe that the things I have mentioned represent their most conspicuous shortcomings.

I wish you an enjoyable and profitable meeting.

Cordially yours,

The following article on "The Making of a Stenographer" was prepared by an important official of a large corporation which covers the country in its operations.

#### THE MAKING OF A STENOGRAPHER

*Preliminary Education.* A prospective stenographer should have had at least a grammar school education. Every year added to this is a solid unit in the foundation of her stenographic training and career. Who would try to build a great structure with no foundation, or with a weak foundation? Grammar school, high school, and college are three of the main stones that support the structure we build later in life. One may inherit character and genius, but never education.

*Stenographic Education.* Almost any intelligent girl can learn the mechanical part of stenography. Can she apply her knowledge in business? Does she know ordinary commercial English? Can she spell? Can she punctuate? Has she learned the routine of business offices? A stenographer who does not know these things is hardly more than a machine.

*Fundamental Adaptability.* To paraphrase an old saying, many a good housemaid has been spoiled to make a hopelessly bad stenographer. Given the proper foundation in the way of education and business training, the next important factor is temperamental and physical suitability. The good stenographer substitutes her employer's convenience for her own. She has a temperamental desire for making herself as useful as possible.

Physically, the stenographer should have ordinary good health and be free from hysteria and irritability. Regular habits and adequate sleep are necessary to keep one physically up to the mark.

The employe who is habitually "on the job" is worth much more to her employer than the one who finds it necessary to be absent frequently from the office because of indisposition, or because other things are more important to her than her employer's affairs.

There are three kinds of stenographers: excellent, tolerable, and bad. The first is a tangible asset in the business world and a blessing to her employer; the second is a necessary evil; while the third is an unmitigated nuisance.

*Ambition.* Is the prospective stenographer going into business to do things or simply to get a pay check? If solely for the latter she will nearly always be a necessary evil. To be a good stenographer she must like work and

be able to forget herself in the larger interests of the business. In big business you will always find some "real" people. "Real" employes are apt to overlook the time and to forget themselves because they are so interested in the business of their employers.

*Common Sense.* Common sense is absolutely necessary to the stenographer's success. Without this the best educated and the best mechanically trained girl will fail. Stenographers who do "fool" things do so because they fail to use common sense. Many things in business life are done correctly through intuition, but intuition is very largely the application of ordinary common sense to a given problem.

To sum up, the successful stenographer should have:

1. Adequate preliminary education.
2. Adequate training in stenography, typewriting, and office routine.
3. Temperamental fitness.
4. Physical fitness.
5. Ambition for things above the ordinary.
6. Common sense.

If we analyze the qualities of a successful stenographer, we shall find that she possesses these characteristics:


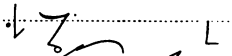
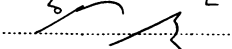
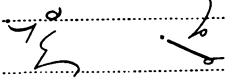
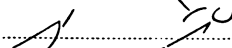
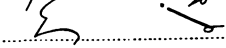
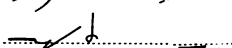
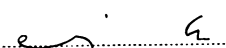

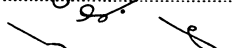

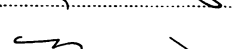
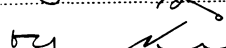
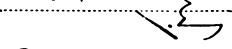

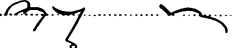
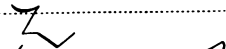
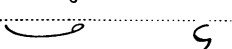
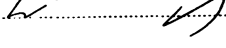
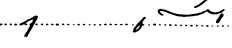
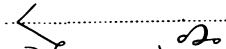
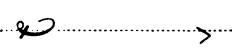
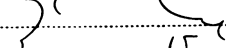

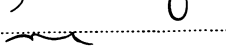


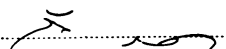


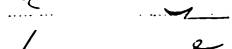
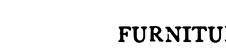
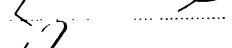


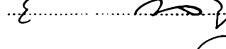
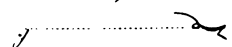
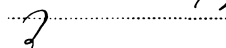
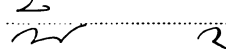
1. She listens very carefully to the dictation and endeavors to follow its sense.
2. She uses punctuation marks intelligently so as to bring out the exact meaning of the dictator.
3. She realizes the importance of getting down the small words—the articles, prepositions, and conjunctions—so that they can be correctly transcribed. The change of an "a" to a "the" often affects the whole sense of the sentence.
4. She applies common sense in the transcription of her notes.
5. She is able to read her notes accurately aloud when called upon to do so.
6. Her typewritten copy is immaculate.
7. She can lay out tabulated matter attractively.
8. She realizes the importance of neatness of personal appearance, good taste in dress, and absolute cleanliness of person.
9. She does not gossip in the office.

10. She considers the information she gets in the course of the business day as confidential and does not discuss business matters outside of the office; neither does she attend to social duties during business hours.


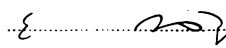
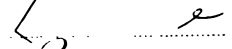
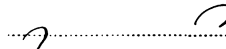
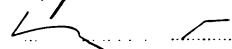
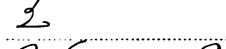

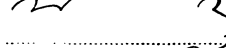


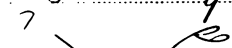

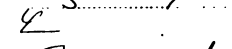
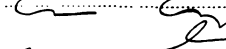
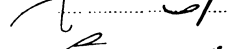
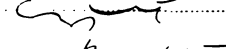
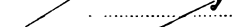
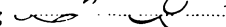








You are starting on a business career. The future is more important than the present. Your pay at the beginning is much less important than the opportunity to gain valuable experience.

# TECHNICAL TERMS

## COLLECTION AGENCY SECTION

|                     |   |                            |   |
|---------------------|---|----------------------------|---|
| accommodation paper |    | joint creditors judgment   |    |
| accrued interest    |   | levy                       |    |
| acquittance         |    | limitation of action       |    |
| affidavit           |    | liquidate                  |    |
| appraisal           |    | litigate                   |    |
| assignee            |   | mercantile agency          |    |
| attachment          |    | mortgage                   |    |
| bankruptcy          |    | Negotiable Instruments Law |    |
| Bill of Particulars |    | payee                      |    |
| chattel mortgage    |    | penalties                  |    |
| collateral security |    | plaintiff                  |    |
| credit memorandum   |    | power of attorney          |    |
| defendant           |    | preferred creditors        |    |
| delinquent          |    | referee                    |    |
| deposition          |   | summons                    |    |
| disbursements       |    | surety                     |   |
| equity              |    | tender                     |  |
| execution           |    | title-clause contract      |  |
| foreclosure         |   | transcript                 |  |
| garnishment         |  | writ                       |  |
| hypothecate         |  |                            |   |
| insolvent           |  |                            |   |

## FURNITURE SECTION

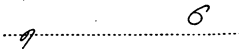
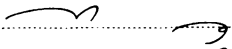
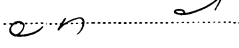
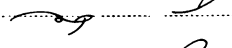
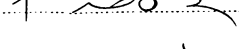
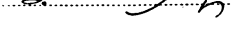
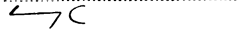
|                    |   |             |   |
|--------------------|---|-------------|---|
| antique            |   | crash       |   |
| bevel-edged        |   | cretonne    |  |
| bird's-eye maple   |  | dado border |  |
| brad               |  | damask      |  |
| buffet             |  | davenport   |  |
| bureau             |  | denim       |  |
| burl               |  | dowel       |  |
| burlap             |  | escritoire  |  |
| caster             |  | fumed oak   |  |
| cheval glass       |  | glider      |  |
| chiffonier         |   | golden oak  |  |
| chiffonette        |  | helical     |  |
| chifforobe         |  | hygienic    |  |
| Circassian walnut  |  | kiln-dried  |  |
| console table      |  | linoleum    |  |
| corrugated matting |  | linters     |  |

TECHNICAL TERMS

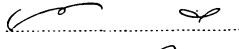
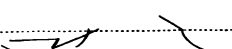
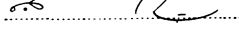
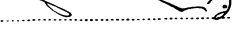
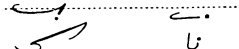
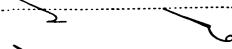
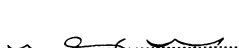

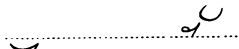

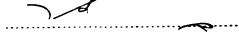
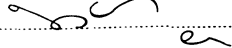
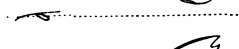
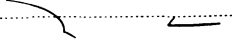
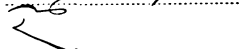
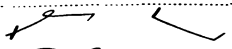
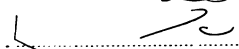
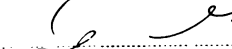
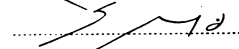
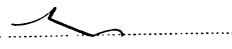
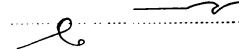


|                         |  |                                |  |
|-------------------------|--|--------------------------------|--|
| madras                  |  | warp                           |  |
| mission                 |  | weathered                      |  |
| mortise and tenon joint |  | webbing                        |  |
| mohair                  |  | <b>PERIOD FURNITURE STYLES</b> |  |
| motif                   |  | American Colonial              |  |
| oxidize                 |  | Chippendale                    |  |
| ply                     |  | French Renaissance             |  |
| poplin                  |  | Gothic                         |  |
| porcelain               |  | Heppelwhite                    |  |
| portieres               |  | Jacobean                       |  |
| replica                 |  | Louis XIII                     |  |
| scrim                   |  | Old English                    |  |
| seasoned                |  | Queen Anne                     |  |
| settee                  |  | Sheraton                       |  |
| sheathing               |  | Tudor                          |  |
| spinet desk             |  | William and Mary               |  |
| suite                   |  | <b>ORIENTAL RUGS</b>           |  |
| tapestry                |  | Kermanshah                     |  |
| tempered                |  | Kirman                         |  |
| ticking                 |  | Mahal                          |  |
| tuna mahogany           |  | Senna                          |  |
| upholster               |  | Serabend                       |  |
| velour                  |  |                                |  |
| vener                   |  |                                |  |
| vulcanized              |  |                                |  |

SHOE SECTION

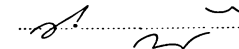
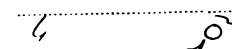
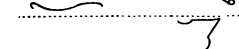

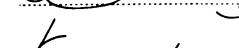
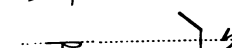


|                     |  |                |  |
|---------------------|--|----------------|--|
| Bal                 |  | instep         |  |
| Blucher             |  | iron           |  |
| box calf            |  | Juliet         |  |
| butts               |  | Kangaroo       |  |
| Cabretta            |  | kip            |  |
| chrome              |  | last           |  |
| Colonial            |  | McKay          |  |
| culls               |  | Nubuck         |  |
| Dongola             |  | offal          |  |
| embargo             |  | ooze finish    |  |
| English Welt        |  | Oxford         |  |
| findings            |  | Oxlite         |  |
| flesh-finished calf |  | packer hides   |  |
| foxing              |  | patent leather |  |
| fudge edge          |  | rejects        |  |
| glazed kid          |  | shank          |  |
| gun metal           |  | snuffed skins  |  |
| insole              |  | Soleoid        |  |

|                  |   |                      |   |
|------------------|---|----------------------|---|
|                  |  | vamp<br>Vici         |  |
| tip              |  | viscolize<br>welt    |  |
| ge<br>: strength |  | wheeling<br>wing tip |  |
| l shoe           |  |                      |   |

PAINTS AND GLASS SECTION

|                  |   |                            |   |
|------------------|---|----------------------------|---|
| ive              |    | neutralize<br>oxide        |    |
| ltum<br>e        |    | panel<br>paraffin oil      |    |
| ring<br>ing      |    | pigment<br>porous          |    |
| arity<br>ing     |    | primer<br>pumice           |    |
| stency<br>te     |    | saponify<br>semi-flat      |    |
| egration<br>city |    | shellac<br>solvent         |    |
| g                |    | specific gravity<br>stucco |    |
| ula<br>etically  |    | thinner<br>toner           |    |
| rmeable<br>able  |   | translucent<br>turpentine  |   |
| 1<br>black       |  | vermillion<br>viscosity    |  |
| d<br>ed oil      |  | volatile<br>wainscoting    |  |
| ous<br>tha       |  | waterproof                 |   |

RAILROAD SECTION

|                           |   |                             |   |
|---------------------------|---|-----------------------------|---|
| of lading<br>t car        |  | docket<br>en route          |  |
| ification<br>modity rates |  | in transit<br>intrastate    |  |
| ignment<br>ling           |  | lighterage<br>manifest      |  |
| rential                   |  | mileage<br>origin territory |  |

TECHNICAL TERMS

|                |  |                   |  |
|----------------|--|-------------------|--|
| Pullman refund |  | traffic           |  |
| rolling stock  |  | trans-continental |  |
| routing        |  | triplicate        |  |
| short haul     |  | validate          |  |
| stenciled      |  | vestibuled train  |  |
| tare           |  | via               |  |
| tariff         |  | way-bill          |  |

REAL ESTATE SECTION

|                   |  |                 |  |
|-------------------|--|-----------------|--|
| abstract of title |  | indemnity       |  |
| abutting          |  | indenture       |  |
| appurtenances     |  | lease           |  |
| architectural     |  | lien            |  |
| assessment        |  | parcel          |  |
| bungalow          |  | plat            |  |
| condemn           |  | realty          |  |
| conveyance        |  | recorder        |  |
| deed              |  | sewerage        |  |
| distrain          |  | site            |  |
| duplex            |  | specifications  |  |
| easement          |  | sublet          |  |
| ejectment         |  | suburban        |  |
| encumbrance       |  | survey          |  |
| eviction          |  | tenant          |  |
| execute           |  | thoroughfare    |  |
| exposure          |  | title insurance |  |
| fee simple        |  | tract           |  |
| grantor           |  | vendor          |  |
| ground-rent       |  | vested          |  |
| hereditaments     |  | warranty deed   |  |
| indefeasible      |  |                 |  |

BANKING AND INVESTMENT SECTION

|                    |  |                     |  |
|--------------------|--|---------------------|--|
| blanket mortgage   |  | cumulative dividend |  |
| broker             |  | debenture           |  |
| bullion            |  | definitive          |  |
| call loans         |  | depository          |  |
| cancellation       |  | drawee              |  |
| capitalization     |  | endorsement         |  |
| clearing-house     |  | Federal Reserve     |  |
| commitments        |  | Bank Act            |  |
| comptroller        |  | fiduciary           |  |
| convertibility     |  | franchise           |  |
| correspondent bank |  | funded debt         |  |
| countersign        |  | income tax          |  |

irredeemable  
liquidation  
memorandum of  
deposit  
non-assessable  
non-fluctuating  
par  
preferred stock  
premium  
protest  
quick assets  
receiver

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redemption  
serial  
sinking fund  
specie  
speculative  
stock certificate  
Stock Exchange  
subsidiary  
syndicate  
tax-exempt  
teller

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ACCOUNTING AND INCOME TAX SECTION

abatement  
aggregate  
administration  
expense  
amortization  
analysis sheet  
antedate  
apportion  
appreciation  
auditor  
burden  
capital stock  
computation  
contra  
corporate  
covenant  
creditor  
debit  
deductible  
default  
deficit  
depreciation  
discrepancy  
fiscal year  
gross profit  
inventory

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liabilities  
minutes  
overhead ex-  
penses  
petty cash  
posting  
prime cost  
proceeds  
production factor  
prorate  
protectograph  
recapitulation  
reconciliation  
reimbursement  
resources  
revenue  
segregate  
surtax  
tangible  
treasury stock  
turnover  
valuation  
verification  
voucher

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PRINTING AND PUBLISHING SECTION

agate line  
bourgeois  
brochure  
caption

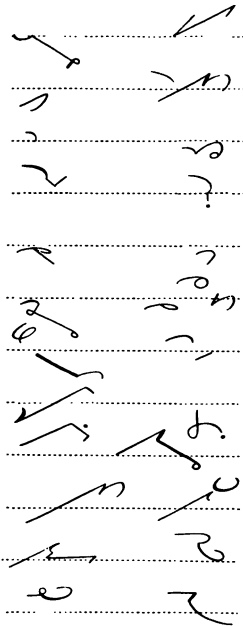
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chromolitho-  
graph  
clarendon  
collate

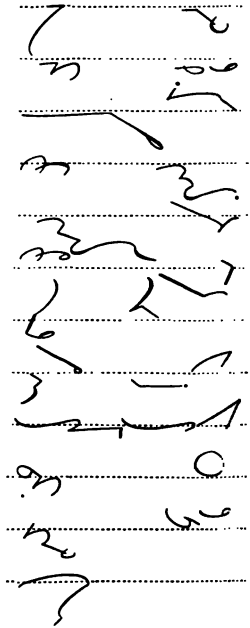
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compositor  
delete  
dummy  
electrotype  
em  
emboss  
erratum  
etching  
folio  
font  
frontispiece  
full-faced type  
galley proof  
half-tone  
interlinear  
justifying  
layout  
letterpress  
linotype  
lithograph  
lithotint  
make-up  
manuscript  
matrix

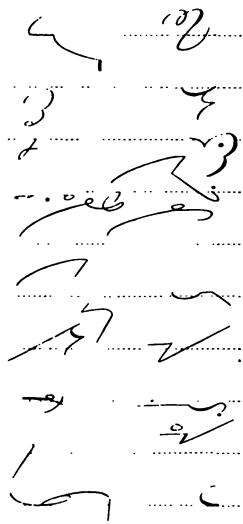


minion  
monograph  
Monotype  
multicolor  
nonpareil  
octavo  
perforate  
photoengraving  
photogravure  
pica  
preface  
proofreader  
quadricolor  
quarto  
rotary press  
running head  
signature  
single leaded  
stereotype  
stet  
typographical  
upper case  
vignette

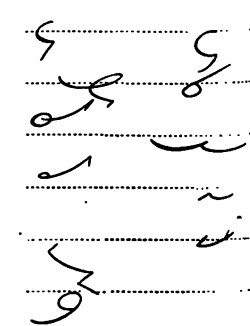


DRY GOODS AND CLOTHING SECTION

admixture  
balbriggan  
bodice  
crochet  
dolman  
embroidery  
flounce  
hand-piping  
hand-scalloped  
hand-smocked  
hand-tufted  
kimono  
lingerie  
medallion  
mercerized  
non-crooking  
plaited  
self-material  
selvage  
sheer

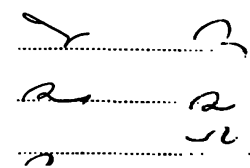



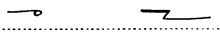
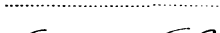
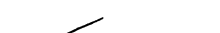
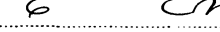
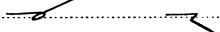


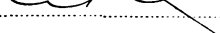
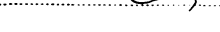

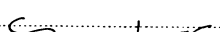
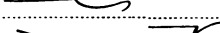


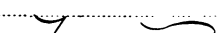
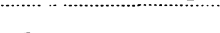

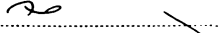
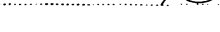

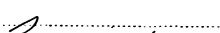


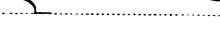
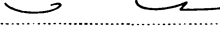
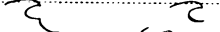

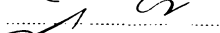
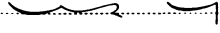


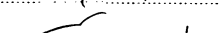
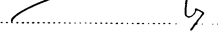
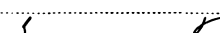


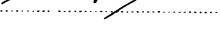
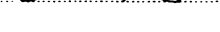
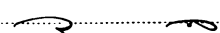
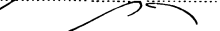




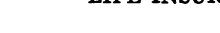


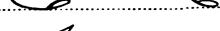

shirred  
shoddy  
silhouette  
stole  
superweight  
surplice  
swatch  
tunic  
tuxedo  
twill  
worsted







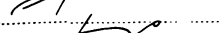
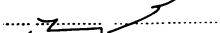

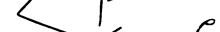
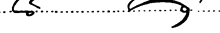
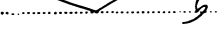
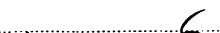

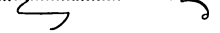

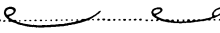
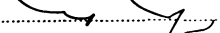


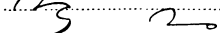





NAMES OF DRY GOODS, FURS, COLORS, ETC.

alpaca  
batiste  
bessette  
bisque  
brocade  
cambric



|                |   |            |   |
|----------------|---|------------|---|
| camelshair     |    | maize      |    |
| cashmere       |    | marten     |    |
| challis        |    | messaline  |    |
| chambray       |    | meteor     |    |
| chamoisette    |    | mignonette |    |
| champain       |    | moire      |    |
| charmeuse      |    | muskrat    |    |
| cheviot        |    | muslin     |    |
| chiffon        |    | nainsook   |    |
| chinchilla     |    | nutria     |    |
| corduroy       |    | organdie   |    |
| covert         |    | pastel     |    |
| crepe          |    | percale    |    |
| crepe de chine |    | picot      |    |
| dimity         |    | piqué      |    |
| duotone        |    | pongee     |    |
| ermine         |    | poulette   |    |
| faille         |    | repp       |    |
| fichu          |    | sable      |    |
| fisher         |    | satın      |    |
| foulard        |    | seersucker |    |
| gabardine      |    | serge      |    |
| georgette      |    | taffeta    |    |
| gingham        |    | taupe      |    |
| glacé          |    | tricolette |   |
| helio          |   | tricotine  |  |
| henna          |  | turquoise  |  |
| jacquard       |  | tussah     |  |
| lavender       |  | tweed      |  |
| linene         |  | velveteen  |  |
| lisle          |  | vigoreaux  |  |
| longcloth      |  | voile      |  |

LIFE INSURANCE SECTION

|                  |   |                    |   |
|------------------|---|--------------------|---|
| accelerative     |  | casualty           |  |
| actuarial        |  | conversion         |  |
| accumulated      |  | contingent lia-    |  |
| dividends        |  | abilities          |  |
| administrator    |  | dependent          |  |
| anniversary date |  | disability         |  |
| annuity          |  | dividend           |  |
| arrears          |  | endowment policy   |  |
| assignment       |  | executor           |  |
| assigns          |  | extended insurance |  |
| beneficiary      |  | grace extension    |  |
| bonus            |  | incontestable      |  |

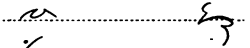
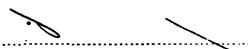
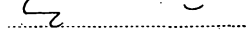

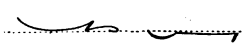

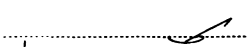
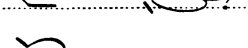
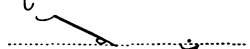
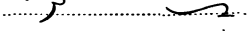

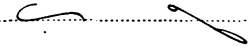

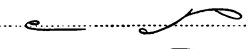
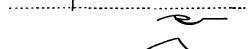
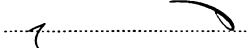
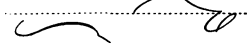
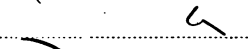
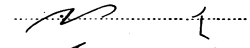
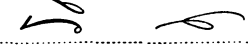
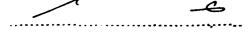

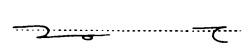

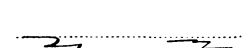
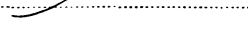


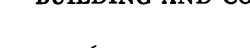

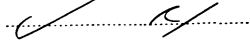
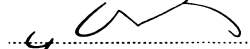
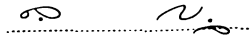
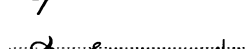
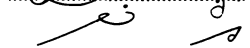
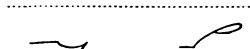
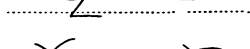
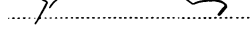
TECHNICAL TERMS

|                      |          |                      |           |
|----------------------|----------|----------------------|-----------|
| industrial insurance |          | reinstatement        |           |
| insurable            | <i>2</i> | release              | <i>5</i>  |
| interim premium      | <i>2</i> | reserve              |           |
| intestate            | <i>2</i> | revocation           | <i>5</i>  |
| invalid              | <i>2</i> | rider                |           |
| lapsed policy        | <i>2</i> | semi-annual          | <i>10</i> |
| limited life policy  | <i>2</i> | straight life policy | <i>10</i> |
| maturity             | <i>2</i> | surplus              |           |
| minor                | <i>2</i> | surrender value      | <i>10</i> |
| non-forfeitable      | <i>2</i> | survivor             |           |
| non-participating    | <i>2</i> | trusteeship          | <i>10</i> |
| option               | <i>2</i> | underwriting         | <i>10</i> |
| paid-up policy       | <i>2</i> | waiver               | <i>10</i> |
| premium              | <i>2</i> |                      |           |
| registrar            | <i>2</i> |                      |           |

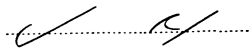
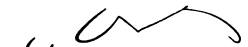
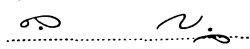

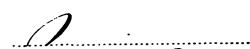
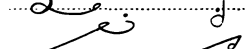
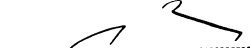
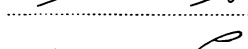

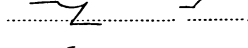
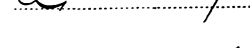
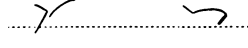
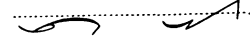
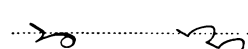
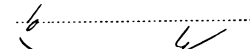
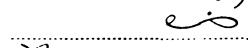
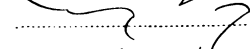
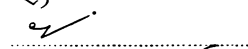
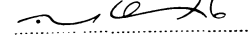


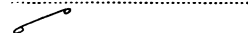






OIL AND OIL REFINING SECTION

|                |          |               |          |
|----------------|----------|---------------|----------|
| abrasion       | <i>g</i> | gaseous       | <i>g</i> |
| adulterate     | <i>g</i> | globule       | <i>g</i> |
| agitator       | <i>g</i> | homogeneous   |          |
| ammonia        | <i>g</i> | hydrogen      | <i>g</i> |
| analysis       | <i>g</i> | illuminant    | <i>g</i> |
| atomize        | <i>g</i> | lubricant     | <i>g</i> |
| bleach         | <i>g</i> | lubricator    | <i>g</i> |
| by-product     | <i>g</i> | orifice       | <i>g</i> |
| carbonization  | <i>g</i> | oscillatory   | <i>g</i> |
| chloride       | <i>g</i> | paraffin      | <i>g</i> |
| chlorine       | <i>g</i> | petroleum     | <i>g</i> |
| congeal        | <i>g</i> | precipitate   | <i>g</i> |
| corrode        | <i>g</i> | pungent       | <i>g</i> |
| crude oil      | <i>g</i> | quenching oil | <i>g</i> |
| decompose      | <i>g</i> | rapeseed      | <i>g</i> |
| deteriorate    | <i>g</i> | refinery      | <i>g</i> |
| distillation   | <i>g</i> | reservoir     | <i>g</i> |
| emulsify       | <i>g</i> | residue       | <i>g</i> |
| evaporation    | <i>g</i> | rotary        | <i>g</i> |
| filtration     | <i>g</i> | sediment      | <i>g</i> |
| flashing point | <i>g</i> | still         | <i>g</i> |
| fluidity       | <i>g</i> | volatilize    | <i>g</i> |
| friction       | <i>g</i> | thermal-con-  | <i>g</i> |
| fuller's earth | <i>g</i> | ductivity     | <i>g</i> |

MACHINE TOOL SECTION

|          |   |               |   |
|----------|---|---------------|---|
| friction |    | pawl          |    |
| matic    |    | pinion        |    |
| fugal    |    | quadrant      |    |
| ometer   |    | ratchet       |    |
| ressor   |    | reamer        |    |
| er-shaft |    | reciprocating |    |
| ler      |    | refractory    |    |
| tric     |    | segment       |    |
| m        |    | sheave        |    |
| nor      |    | spindle       |    |
| onal     |    | spline        |    |
| ulic     |    | swivel        |    |
| or       |    | tension       |    |
| able     |    | thermal       |    |
| anism    |    | throttle      |    |
| meter    |   | tractor       |    |
| ntum     |  | traverse      |   |
|          |   | valve         |  |
|          |   | weir          |  |
|          |   | winchhead     |  |
|          |   | windlass      |  |

BUILDING AND CONTRACTING SECTION

|        |   |             |   |
|--------|---|-------------|---|
| ment   |   | girder      |    |
| lt     |  | granolithic |   |
| illing |  | interstices |  |
| rint   |  | joist       |  |
| ead    |  | landscaping |  |
| ess    |  | lattice     |  |
| ete    |  | macadam     |  |
| it     |  | manhole     |  |
| rt     |  | radiation   |  |
| age    |  | rafter      |  |
| tion   |  | reinforced  |  |
| le     |  | riprap      |  |
| ation  |  | rubble      |  |
| ce     |  | scaffolding |  |
| t      |  | scantling   |  |
| nize   |  | shoring     |  |
|        |   | sluice      |  |
|        |   | stanchion   |  |

stud  
subcontractor  
Telford  
terra cotta

*ou*  
*o* *n*  
*r* *v*

tiling  
topography  
vitrified  
weep holes

*✓*  
*u* *u*  
*n* *p*

AUTOMOBILE SECTION

accelerator  
anti-skid  
assembling  
autophone

*6* *ry*  
*e* *h*  
*v* *e*

housing  
ignition  
landulet  
limousine

*o* *u*  
*n* *n*  
*n* *o*

backlash  
brougham

*v* *e*  
*u* *e*

magneto  
manifold

*n* *o*  
*n* *o*

carburetor  
chassis

*u* *e*  
*u* *e*

poppet  
resilient

*n* *u*  
*n* *u*

chauffeur  
clutch

*u* *u*  
*u* *u*

sector  
sedan

*u* *u*  
*u* *u*

combustion  
compression

*u* *u*  
*u* *u*

short-circuited  
speedometer

*u* *u*  
*u* *u*

condensation  
coupé

*u* *u*  
*u* *u*

sprocket  
terminal

*u* *u*  
*u* *u*

cowl  
deflation

*u* *u*  
*u* *u*

thermostat  
tonneau

*u* *u*  
*u* *u*

demountable  
differential

*u* *u*  
*u* *u*

transmission  
trunnion

*u* *u*  
*u* *u*

flush  
garage

*u* *u*  
*u* *u*

vaporize  
victoria

*u* *u*  
*u* *u*

IRON AND STEEL SECTION

alloy  
angle-iron  
annealing  
Bessemer steel

*f* *u*  
*u* *u*  
*u* *u*  
*u* *u*

forgings  
foundry  
fracture  
fusion

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*u* *u*  
*u* *u*  
*u* *u*

billets  
blast-furnace

*u* *u*  
*u* *u*

galvanometer  
high-speed steel

*u* *u*  
*u* *u*

bloom  
carbon

*u* *u*  
*u* *u*

ingot  
longitudinal

*u* *u*  
*u* *u*

cast-iron  
chemist

*u* *u*  
*u* *u*

mandrel  
manganese

*u* *u*  
*u* *u*

chromium  
contour

*u* *u*  
*u* *u*

metallurgical  
mica

*u* *u*  
*u* *u*

corrugated  
crucible

*u* *u*  
*u* *u*

milling  
open-hearth steel

*u* *u*  
*u* *u*

elastic limit  
elongation

*u* *u*  
*u* *u*

phosphorus  
pig-iron

*u* *u*  
*u* *u*

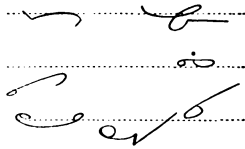
fabricate  
flux

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*u* *u*

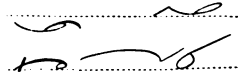
pipe  
puddling

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*u* *u*

rivet  
silicon  
slug  
smelting  
splices  
structural steel

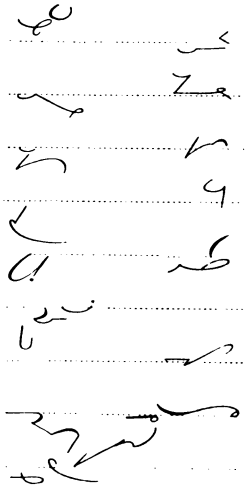


sulphur  
tensile  
transverse  
vanadium steel

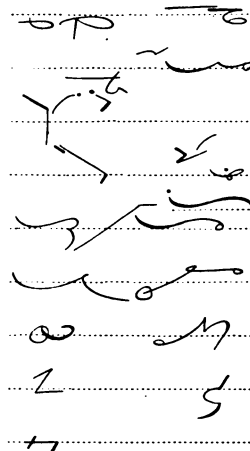


TELEPHONE SECTION

calculagraph  
commutator  
composite  
condenser  
conductivity  
diaphragm  
duplex  
gauge  
grounding  
insulator  
intercommuni-  
cating  
jack  
metallic  
microfarad  
Morse service  
multiplex tele-  
phony

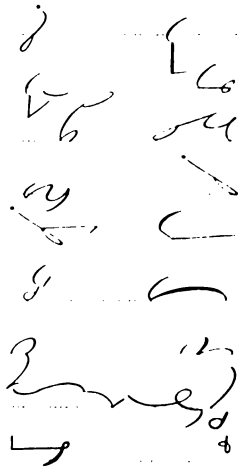


multi-voltage  
non-commercial  
non-conductor  
phantom circuits  
originating  
operator  
repeater  
retardation coils  
section lineman  
service observer  
simplex  
sublicense  
subscriber  
switchboard  
tandem  
tertiary  
transmitter

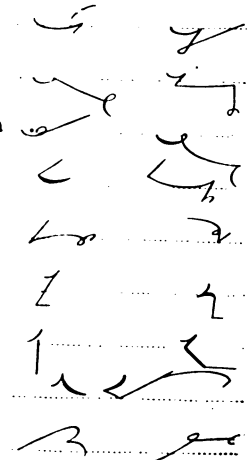


LEGAL SECTION

acquittal  
adjournment  
adjudication  
admissible  
alienable  
allegation  
ambiguity  
appeal  
appellant  
arraignment  
attestation  
averment  
bequeath  
brief  
caveat  
cestui que trust  
chancery  
chattels



citation  
codicil  
composition  
contingency  
counsel  
cross-examination  
decree  
descendible  
devisable  
escheat  
indictment  
infringement  
injunction  
in terrorem  
inure  
irrelevant  
legatee  
licensee



TECHNICAL TERMS

|             |  |  |              |  |  |
|-------------|--|--|--------------|--|--|
| litigious   |  |  | residuary    |  |  |
| mandamus    |  |  | respondent   |  |  |
| parol       |  |  | signatory    |  |  |
| perjury     |  |  | situate      |  |  |
| petition    |  |  | subpoena     |  |  |
| prayer      |  |  | tantamount   |  |  |
| probate     |  |  | tentative    |  |  |
| prosecution |  |  | testamentary |  |  |
| rebuttal    |  |  | testatrix    |  |  |
| remainder   |  |  | validity     |  |  |
| replevin    |  |  | venue        |  |  |
| replication |  |  |              |  |  |

ELECTRICAL SECTION

|                     |  |  |               |  |  |
|---------------------|--|--|---------------|--|--|
| alternating current |  |  | molecular     |  |  |
| aluminum            |  |  | ohmic         |  |  |
| ammeter             |  |  | oscillation   |  |  |
| ampere              |  |  | periodicity   |  |  |
| armature            |  |  | phase         |  |  |
| battery             |  |  | polarity      |  |  |
| calibrate           |  |  | potential     |  |  |
| candle-power        |  |  | printometer   |  |  |
| Centigrade          |  |  | relay         |  |  |
| circuit             |  |  | resister      |  |  |
| coefficient         |  |  | rheostat      |  |  |
| concentric duct     |  |  | rotor         |  |  |
| dynamo              |  |  | shunt         |  |  |
| electrolytic        |  |  | stator        |  |  |
| exciter             |  |  | synchronous   |  |  |
| filament            |  |  | transformer   |  |  |
| generator           |  |  | transmission  |  |  |
| grid                |  |  | tungsten      |  |  |
| high tension        |  |  | vacuum        |  |  |
| integrating meter   |  |  | vane          |  |  |
| incandescent lamp   |  |  | velocity      |  |  |
| kilowatt            |  |  | vitrification |  |  |
| lamination          |  |  | voltage       |  |  |
| metering            |  |  | voltmeter     |  |  |
| millivolt           |  |  | watt          |  |  |
|                     |  |  | wattmeter     |  |  |









